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North Lake College Catalog
Volume Two 1978-1979

The Dallas County
Community
College District

A Community College District recognized and sanctioned by
The Coordinating Board, Texas College and University System

North Lake College
Candidate Status in the Southern Association of Colleges
and Schools (SACS)
Member of the American Association of Community and
Junior Colleges
Member of Texas Public Community/Junior College
Association
Member of the Association of Texas Colleges and
Universities
Member of the League for Innovation in the Community
College
An Affirmative Action Equal Opportunity Institution

The information in this catalog is based upon present conditions and is subject to change without notice. The College reserves the right to modify or amend any statement or policy to reflect current Board policies, administrative regulations or procedures and applicable State or Federal laws or regulations.
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# CALENDAR

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<td>August 21 (M)</td>
<td>Faculty Reports</td>
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<td>August 22-24 (T-R)</td>
<td>Registration</td>
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<td>August 25 (F)</td>
<td>Faculty Professional Development</td>
</tr>
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<td>August 26 (S)</td>
<td>Saturday classes begin</td>
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<tr>
<td>August 28 (M)</td>
<td>Classes begin</td>
</tr>
<tr>
<td>September 1 (F)</td>
<td>Last day for tuition refund</td>
</tr>
<tr>
<td>September 4 (M)</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 9 (S)</td>
<td>12th class day</td>
</tr>
<tr>
<td>November 10 (F)</td>
<td>Veteran’s Day Holiday</td>
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<tr>
<td>November 23 (R)</td>
<td>Thanksgiving Day Holiday begins</td>
</tr>
<tr>
<td>November 27 (M)</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December 11 (M)</td>
<td>Last day to withdraw “W”</td>
</tr>
<tr>
<td>December 16 (S)</td>
<td>Final Exams, Saturday classes</td>
</tr>
<tr>
<td>December 18 (M)</td>
<td>Last day of classes</td>
</tr>
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<td>December 19-22 (T-F)</td>
<td>Final Exams</td>
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**SPRING SEMESTER, 1979**

<table>
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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>January 8 (M)</td>
<td>Faculty Reports</td>
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<td>January 9-11 (T-R)</td>
<td>Registration</td>
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<td>January 12 (F)</td>
<td>Faculty Professional Development</td>
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<td>January 13 (S)</td>
<td>Saturday classes begin</td>
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<td>January 15 (M)</td>
<td>Classes begin</td>
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<tr>
<td>January 19 (F)</td>
<td>Last day for tuition refund</td>
</tr>
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<td>January 26 (F)</td>
<td>12th class day</td>
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<tr>
<td>February 16 (F)</td>
<td>Faculty Professional Development</td>
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<td>March 11 (S)</td>
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<tr>
<td>March 19 (M)</td>
<td>Classes resume</td>
</tr>
<tr>
<td>April 13 (F)</td>
<td>Easter Holiday begins</td>
</tr>
<tr>
<td>April 16 (M)</td>
<td>Classes resume</td>
</tr>
<tr>
<td>May 4 (F)</td>
<td>Last day to withdraw “W”</td>
</tr>
<tr>
<td>May 8 (T)</td>
<td>Last day of classes, T R</td>
</tr>
<tr>
<td>May 10 (R)</td>
<td>Final Exams, T R</td>
</tr>
<tr>
<td>May 11 (F)</td>
<td>Last day of classes, M W F</td>
</tr>
<tr>
<td>May 12 (S)</td>
<td>Final Exams, Saturday classes</td>
</tr>
<tr>
<td>May 14-16 (M-W)</td>
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<td>May 16 (W)</td>
<td>Graduation</td>
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SUMMER SESSION, 1979

First Session
May 28 (M)  Memorial Day Holiday
May 29 (T)  Registration
May 31 (R)  Classes begin
June 1 (F)   Last day for tuition refund
June 5 (T)   4th class day
June 28 (R)  Last day to withdraw "W"
July 4 (W)   Independence Day Holiday
July 5 (R)   Final Examinations

Second Session
July 9 (M)   Registration
July 11 (W)  Classes begin
July 12 (R)  Last day for tuition refund
July 16 (M)  4th class day
August 8 (W)  Last day to withdraw "W"
August 14 (T) Final Examinations
ADMINISTRATION

North Lake College Administration

President ........................................... Donald L. Newport
Vice President of Instruction .................. Glen I. Bounds
Vice President of Student Services .......... Walter H. Bowie
Vice President of Business Services ...... Mike E. Howard
Associate Dean of Technical/Occupational Programs ...................... Clifton A. Weaver
Associate Dean of Continuing Education .... Rick R. Bolin
Associate Dean/Learning Resources Center ............................... Jerry M. Linker
Assistant Dean/Evening Programs .............. Joel Vela
Director of Admissions and Registration .... Bonnie Rieman
Director of Counseling .......................... Bruce Thomas
Director of Financial Aid ....................... Paul T. Chapman
Director of Public Information ............... Sue Stallings Anders
Director of Student Services .................. Nancy L. Evans
User Coordinator/Research ..................... Lynn Cole

Division Chairpersons

Business and Management ....................... W. Gary Bacon
Communications and Humanities ............ Arthur Southerland
Math Science and Technology ................. B. T. Anderson
Social Science and Physical Education .... Martha Hughes

Telephone Listings

Admissions and Registration .................... 255-5220
Business Office .................................. 255-5231
Community Service Programs ................. 255-5201
Computer/Research Coordinator .............. 255-5230
Evening Administration ......................... 255-5205
Financial Aid ..................................... 255-5218
Library ............................................. 255-5337
Placement and Cooperative Education ...... 255-5218
President .......................................... 255-5229
Public Information ................................ 255-5230
Security and Safety .............................. 255-5244
Technical Occupational Programs ........... 255-5237
Vice President of Instruction ............... 255-5228
Vice President of Student Services ........ 255-5226
Vice President of Business Services ...... 255-5225
The Dallas County Community College District's seven innovative educational communities are dedicated to a common goal: serving in the best possible way the complex, varied and ever-changing educational requirements of a growing metropolitan community.

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

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

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

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

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

The District officially became the Dallas County Community College District in 1972, when its philosophy, function and breadth outgrew the traditional "junior"
The new name more closely states the District’s mission — to meet the educational needs of the entire metropolitan community.

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

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

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

In 1977, Dallas County Community College District opened two new campuses, Cedar Valley College in Lancaster, and North Lake College in Irving. Brookhaven College, the final college in the seven-college master plan, opened for enrollment in August, 1978.

How do the District’s colleges serve the educational requirements of such a complex family? The answer is found in educational offerings in four broad categories:

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

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

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

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

The Dallas County Community College District is governed by a seven-member Board of Trustees elected by the registered voters of Dallas County. The Board has the responsibility of formulating broad public policy for the District and ultimately provides review and control of District activities.
North Lake is the culmination of years of planning to build a college center which makes learning opportunities accessible to all the citizens of the area and is another link in the Dallas County Community College District’s commitment to build facilities close to where people live and work.

However, North Lake is more than just another facility. It is an example of putting into operation what we know about teaching and learning. The facility itself is designed to provide you as a student with a pleasant environment, a place where you are the customer and where you can see and explore new educational opportunities. It would not be unrealistic to consider North Lake your educational shopping center.

As an educational shopping center, the College realizes that to stay in business, it needs to deliver the kinds of goods and services which you want and need. For example, the College has designed a flexible system to encourage you to enter when you are ready, leave when you have completed your objectives, and re-enter when you feel a need for more education.

Nearly all programs allow you to progress based upon your ability to learn and perform the required objectives without freezing you into a set time requirement which does not consider your individual learning rate. Carrying this concept a step further, all programs at North Lake are based upon performance objectives so that you will know exactly what is required for successful completion. Another unique feature of North Lake is its dedication to providing most of you with a variety of “earn and learn” experiences so that the reality of the everyday world of work is combined with the classroom laboratory.

In this light, the college is proud to consider its $21,000,000 campus a people place where all people feel comfortable, but the North Lake concept also recognizes that education can no longer be looked upon as taking place only in a
school building. The college looks upon the total community as having potential for teaching and learning. As a student at the college, you have the opportunity to see the real world and what such a partnership between education and society at large can produce.

Finally, just developing an immediate, good educational program for you and the communities we serve is not enough.

The educational process is a human one and if it is to really be successful, we must be concerned with you throughout life. As we look to the future, we know that rapid change is a constant we can depend upon and that you will likely have a need for future education five, ten, or twenty years from today. North Lake will actively work to assist you to get your first job or to make a successful transition to a four-year college after completing one of its many programs. And, we will follow up with you to determine how you are doing and what strengths and weaknesses we have as a college. But, most important, your college works hard to assure that you feel a part of the institution throughout your life and to welcome you back at any time for further skill development or enrichment.

After all, your success is North Lake's success. You are important to us.

Donald L. Newport
President

Accreditation and Affiliation at North Lake College

Colleges of the Dallas County Community College District are members of the American Association of Community and Junior Colleges and are recognized and sanctioned by the Coordinating Board of the Texas College and University System. The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to those institutions. North Lake College enjoys candidacy status with the Southern Association of Colleges and Schools. All sister colleges of the District have enjoyed the same well considered relationship with this accrediting agency and are proud of the support shown our colleges by this prestigious organization.

League for Innovation

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

The College's admission policy is "open door." It insures that all persons who can profit from post-secondary education will have an opportunity to enroll.

Applications will be accepted any time prior to registration. Since registration priorities are assigned according to the date an applicant fulfills all admission requirements, applicants should plan to submit applications at least three weeks before registration to insure adequate counseling and schedule planning.

Applications received after this date will receive a low priority. All applicants are limited in their selection of classes to those available when they register.

Enrollment is available in certain courses at times other than regular semester registration. Consult the registrar's office for information.

1. **Beginning Freshmen:**
   Students enrolling in college for the first time may apply if they are:
   • A graduate from an accredited high school.
   • A graduate from an unaccredited high school who is eighteen years of age.
   • A non-high school graduate who is eighteen years of age and whose high school class has graduated.
   • 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, but not for more than six hours per semester, providing the student is making normal progress toward high school graduation.

2. **Transfer Students:**
   • College transfer applicants will be considered for admission on the basis of their previous college record. Academic standing for transfer applicants will be determined by the Office of Admissions based on the standards established by the College.
   • Students on scholastic or disciplinary suspension from another institution must petition via the Admissions Office to the Committee on Admissions and Academic Relations for special approval.
3. **Former Students:**
   - Former Dallas County Community College District students will be required to submit an application for readmission to any one of the District colleges. A student will not be readmitted to any college within the District if he or she has unsettled financial debts at any of the District Colleges.

4. **Non-Credit Students:**
   - Students seeking enrollment for non-credit courses are directed to contact the Division of Community Service Programs.

Exceptions to these requirements will be referred to the Committee on Admissions and Academic Relations.

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**International Students**

The College is authorized under Federal Law to enroll non-immigrant alien students. However, foreign students are not admitted until all admission requirements are complete. In addition to admission requirements for all other students, international students must demonstrate proficiency in English, provide evidence of financial stability, and meet with the foreign student advisor for general counseling concerning his potential for profiting from the educational programs of the College before admission can be finalized.

Admission procedures for international students are regulated by the President of the College and may require his permission for enrollment.

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**Equal Educational Opportunity Policy**

The college is committed to providing equal educational and employment opportunity regardless of sex, marital or parental status, race, color, religion, age, or natural origin. Title IX of the Educational Amendments of 1972 prohibits discrimination on the basis of sex in any educational program or activity receiving federal financial assistance by way of grant, contract, or loan. Title VI of the Civil Rights Act of 1964 is similar in its prohibition of discrimination on the basis of race, color, sex or natural origin. Equal educational opportunity includes: admission, recruitment, extracurricular programs and activities, housing, facilities, access to course offerings, counseling and testing, financial assistance, employment, health, and insurance services, and athletics. The college is also committed to equal opportunities for the physically or mentally handicapped in compliance with federal regulations, Sec. 504, Rehabilitation Act of 1973.

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

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

- an application for admission
- an official transcript from the last school (high school or college) attended. Transcripts are required by the college’s accrediting agency and are important for program advising in the Counseling Center. Students who are seeking a certificate or associate degree and veterans receiving VA benefits are required to submit official transcripts of all previous college work prior to the end of the first semester. An official transcript is one that is sent directly to North Lake from another college.
- written proof from a medical office of
  - a negative tuberculin skin test or chest X-ray
  - a polio immunization if the applicant is under 19 years of age
  - a diphtheria/tetanus injection within the last ten years

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

The Dallas County Community College District has committed its staff to providing programs which may be entered at the first of every month. In addition to the regular registration periods, registration for courses offered through Flexible Entry is the Wednesday and Thursday preceding the first Monday of each month. Registration is in the Registrar’s Office and requires instructor’s approval.

Students should check with the Registrar’s Office each month to determine the courses which will be offered.

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

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

Students who are admitted with a grade point deficiency cannot graduate from this college until this deficiency has been cleared.
Credits earned in military service-connected schools or through the U.S. Armed Forces Institute will be reviewed by the Director of Admissions and credit granted if applicable.

**Tuition**

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

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

**Tuition — Fall or Spring Term**

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

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

**Tuition — Summer Session**

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

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

**Special Fees and Charges**

- **Student Service Fee:**
  - 3 or less credit hours — no charge.
  - 4 or more credit hours — $1 per credit hour beginning with the fourth hour up to a maximum of $10.
- **Laboratory Fee (per lab):**
  - $2 to $8 a semester.
- **Physical Education Fee:**
  - $5 a semester.
Private Music Lessons Fee:**
$20 per ½ hour.
$35 per hour.
maximum charge for one course

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

Credit by Examination:***
$20 per exam.

**Available only to music majors enrolled for 12 hours or more.
***This fee can change without prior notice.

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 taking part in the commencement exercise will pay for cap and gown rental.

The Refund Policy 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.

- No 100% refund is granted unless college error is involved.
- An 80% refund of tuition and fees may be obtained through the date noted in the college calendar. 80% refund will be given through the first two class days of a six weeks summer session or Fasttrak semester. Refunds for flexible entry courses will be considered through completion of the second day of class from the date of enrollment.
- Credit by Examination: No refund will be given for advanced Credit by Examination. No refund will be given for advanced placement or CLEP exams.
- A physician’s statement must be submitted with petitions related to medical reasons for withdrawing from college.
- Requests for refunds must be submitted before the end of a semester session for which the refund is requested.
- A refund of less than $4 for tuition and/or fees will not be made.
- Refund Policy forms are available in the office of Financial Aid and Vice President — Student Services.

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

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

Servicemen’s Opportunity College

The colleges of the Dallas County Community College District, in cooperation with other community colleges in the United States, participate in the Servicemen’s Opportunity College. This program enables the institution to plan an educational experience with the serviceman regardless of his mobility pattern.

For further information, contact the Office of Financial Aid.

Financial Aid

Our college offers a full range of financial aid programs. For additional information see page 29.

Advisement Procedures

When students receive their letter of acceptance, they will be invited to an advisement session. This session may be conducted individually or as a group with a counselor; however, beginning freshmen are expected to attend a New Student Orientation. It is designed to help students make schedule choices based on assessment of courses or programs. The half-day session is designed for students who are enrolling in college for the first time and who expect to attend full-time.

A variety of diagnostic instruments may be used for assessment and placement in courses or programs; however, none are required for admission. These instruments are used as counseling tools for more reliable placement. For those students who wish to send their ACT scores for placement, use the code for this college (4141).

Developmental Studies are provided for those students who may require developmental assistance in reading, writing, or math. Test data, transcripts or previous work, and counseling assessment may be used to determine placement in this program.

Name, Address, and Social Security Number

Students are reminded to inform the Office of the Registrar of any changes which occur in their name or address. All applicants are asked to furnish a social security number which is used as the student’s identification number and to insure accuracy of student records.
In compliance with the Family Educational Rights and Privacy Act of 1974, Federal Law 93-380, information classified as “directory information” may be released to the general public without the written consent of the student. Directory information is defined as:

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

A student may request that all or any part of the directory information be withheld from the public by making written request to the Registrar’s Office during the first twelve class days of a fall or spring semester, or the first four class days of a summer term. If no request is filed, information will be released upon inquiry. No telephone inquiries will be acknowledged; all requests must be made in person.

No transcript or inquiries concerning an academic record will be released without WRITTEN CONSENT from the student specifying the information to be given out, except as specified by law.
ACADEMIC INFORMATION

The College confers the Associate in Arts and Sciences Degree or the Associate in Applied Arts and Sciences Degree upon students who have completed all the general and specific requirements for graduation.

Each degree candidate must earn the last 15 hours as a resident student in the District colleges or accrue 45 hours in residence.

The degree will be granted by the college at which the student took the last 15 hours or where the majority of hours were accrued.

Correspondence work submitted for graduation credit must be approved by the Registrar. No more than one-fourth of the work required for any degree or certificate may be taken by correspondence.

The Associate in Arts and Sciences Degree is designed for the student who wishes to pursue a two-year liberal studies degree and/or transfer to a four-year institution for the baccalaureate degree.

A student must have a total of 60 hours and present an average grade of at least "C" (2.0).

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**

**Laboratory Science** (Music majors are exempt from this requirement. (Check listings under subject field). **8 Hours**

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

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

A maximum of two physical education activity hours may be counted as credit toward requirements for graduation. 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.

Courses numbered 99 and below may not be counted toward the 60-hour minimum.

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

*Only 3 hours of History or 3 hours of Government credit may be earned by credit-by-examination. (CLEP credit does not meet this requirement.)
The Associate in Applied Arts and Sciences Degree is designed for the student who wishes to study for a two-year degree in technical and occupational studies. This degree is designed to enable students to enter the job market in their chosen field. In many cases universities are willing to accept hours accumulated toward this degree as applicable to a four-year technology degree. Students should consult the university to which they wish to transfer for transferability information.

A minimum of 60 hours exclusive of Art 199, Music Recital 199, and Theatre 199 must be presented for the degree with an average grade of at least “C” (2.0). All of the prescribed requirements for the specific technical or occupational program for which the student is enrolled must be completed. These programs may also have criteria for successful completion beyond degree requirements. The student is referred to the “Technical Occupational Program” section of this catalog for a more detailed explanation.

A maximum of two physical education activity hours may be counted as credit toward graduation. Courses numbered 99 and below cannot be included to meet the degree or certificate requirements.

The requirements one must meet to be awarded a certificate are detailed under specific programs listed in the Career Programs section of this catalog. A “C” (2.0) grade average is necessary to meet the requirements of the certificate program in which the student is enrolled.

The Associate in General Studies Degree is a creatively open-ended degree program that focuses on education for individual development. The curriculum, or pattern of courses, is an individualized selection of courses drawn from adult continuing education courses, liberal studies, technical/occupational course offerings and non-credit community service courses.

To earn this degree a student, under the advisement of the Committee on General Studies, must complete at least 60 General Studies Units (GSU)s with at least the last 15 GSUs completed at North Lake College.

One GSU is the equivalent of one semester credit hour or 1.5 C.E.U.s (Continuing Education Units) earned in Community Service non-credit courses. A C.E.U. is the equivalent of ten contact hours of participation in an organized continuing education program, such as those found in Community Service courses. C.E.U. equivalents for continuing education courses in Community Service are indicated in the Community Service catalogs.

The Associate in General Studies Degree student works with an advisor designated by the Committee on General Studies to build the individualized degree plan. The proposed plan for each student must be reviewed and approved by the entire committee before it is officially accepted.
Associate in General Studies Degree Requirements:
The student must earn at least nine (9) GSUs in each of at least four of the following five areas of study for a total of 36 GSUs:

1. Communication Skills — English, Communications, Journalism, Speech, etc.
2. Personal Growth & Development — Psychology, Human Development, Personal Finance, etc.
3. The Dimensions of Society — History, Sociology, Government, Economics, Business, etc.
4. Experiential Learning — Specially designed courses which can include a wide range of learning experiences under the college's auspices including but not limited to internships, short or long term seminars or working experiences. Such courses are approved under the guidance of the A.G.S.D. advisor.
5. Humanities & Recreation — Physical Education, Art, Music, Theatre, Humanities, etc.

The student must achieve a cumulative grade point average of 2.00 ("C") or better on credit courses applied toward graduation. Performance in non-credit courses must meet course standards for awarding of C.E.U.s.

No more than 30 semester hours of credit which have been applied toward a previously earned college degree may be transferred for use in the Associate in General Studies Degree program.

No more than nine (9) GSUs earned in Developmental Studies may be applied toward the A.G.S.D.

No more than fifteen (15) GSUs earned in Community Service/Continuing Education courses (all earned in the Dallas County Community College District) may be applied toward the A.G.S.D. For further information on the Associate in General Studies Degree contact the Admissions Office or the Continuing Education Office.

1. The student should request a degree plan from the Admissions Office upon completion of 30 semester hours. Official transcripts of all previous college work must be on file at the time of the request for a degree plan.

2. A student following a 1-year certificate program should request an official plan during his first semester.

Candidates for any degree or certificate must meet the requirements as set forth in the catalog for the year of first enrollment unless he elects to graduate under the requirements of a later catalog. The choice to graduate under the original catalog assumes a student has pursued a program of study with reasonable diligence. A candidate must indicate the catalog of his choice when he files his degree plan.
To qualify for a second degree or certificate a student must fulfill the residence requirement for the second degree and must complete all required courses in the plan for the second degree or certificate.

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

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

Extreme care should be exercised in the registration process. A student should schedule only those courses for the days and hours he is able to attend. As a general policy, class changes are only authorized for students who have been incorrectly placed.

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

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

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

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

A person who believes he is qualified by experience or previous training may take a special examination to establish credit in a particular course. Not all courses are approved for credit by examination. A list of those credits which may be established through this method is available in the Testing Center.

Students will be allowed to earn as many credits through the credit-by-examination procedure as their needs require and abilities permit. However, the minimum number of hours as a resident student required for a certificate or a diploma may not be reduced through credit-by-examination.
Credit by examination may be attempted only one time in any given course. A score of "C" is required to receive credit. Only currently enrolled students will have the semester hours earned through examination become part of their permanent record. Request for examinations should be made to the appropriate division office which will provide the necessary petition forms and advise the student of the procedure.

A student, whether part-time or full-time, will pay $20 per exam. This fee must be paid prior to taking the exam and is nonrefundable. Upon transferring to a four-year institution, final acceptance of credit by examination is determined by that institution. No more than three credit hours can be earned by credit by examination for the degree requirements in History and Government.

Any person 18 years of age or older may, with the consent of the instructor, and provided that space is available, 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.

The combined number of semester hours in credit courses and audit shall not exceed 18.

At the end of each semester, grade reports are issued to each student. Transcripts will be withheld if the student does not have all required student information on file in the Registrar's Office or if any financial obligations to the College have not been paid. (Cf. Standard of Conduct for Students: "Financial Transactions With the College")

A student is not considered enrolled until tuition and fees are paid. Checks returned to the Business Office must be paid in cash.

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

College work is measured in terms of semester credit hours or units. The number of semester hours or units of credit offered for each course is included with each 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, but are not computed in determining graduation requirements.

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:

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

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

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

Suspended students must file a petition for readmission. The conditions for readmission are established and administered by the Vice President — Student Services.
Any student pursuing an academic transfer program who wishes to transfer to a career program may have his earned credits evaluated for the possibility of disregarding any grades of his choice below "C" as long as the student follows the career program. This procedure is contingent upon the student remaining in a career program. A change to an academic transfer program places the student under the original conditions of that program.

This procedure will apply both to our students and to the students transferring from other institutions. Any student wishing to take advantage of this opportunity should state his intentions in writing to the Director or Admissions prior to registration and assume the responsibility of informing his counselor during pre-registration advisement.

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

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

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 the student is absent from class.

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

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

Students 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. If a student does not attend a class for the first 12 days of a long semester, or the 4th class day of a summer session, he/she will automatically be withdrawn by the Registrar.

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

**Honors**

A full-time student who has completed at least 12 hours of credit and who earns a grade-point average of 3.00-3.49 will be listed on the college Honor Roll. Full-time students who complete at least 12 hours of credit and who average 3.50-4.00 will be placed on the Vice President's Honor List. A part-time student who is taking 6-11 credit hours and who maintains a 3.5 or higher grade-point average will receive Academic Recognition. The Honor Roll, the Vice President's Honor List and the Academic Recognition List will be published each semester.

**Transcripts of Credit**

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. The first transcript will be issued without charge; there is a $1 charge for each transcript requested thereafter.

**Student Classification**

- Freshman: A student who has successfully completed fewer than 30 semester hours.
- Sophomore: A student who has successfully completed 30 or more semester hours.
- Part Time: A student enrolled in fewer than 12 semester hours in a given semester.
- Full-Time: A student enrolled in 12 or more semester hours in a given semester.

**Graduation**

An annual graduation ceremony is held at the conclusion of the spring semester.

1. Students who have degree plans filed in the Registrar's Office and who anticipate completion of the degree requirements by the end of the summer session are eligible to participate in the spring ceremony. Such participation is ceremonial and confers on a student no rights to a degree.

2. Application for graduation must be made in the Registrar's Office prior to the deadline announced by the Registrar.

3. A graduate is expected to participate in the ceremony.
STUDENT SERVICES

Our college strives to provide maximum educational opportunities, personal, social, cultural and career development for all students. Such development is stimulated through programs of coordinated college services as needed by any individual student or by groups of students. These services are evaluation, counseling, planning, tutoring, and programs of student activities.

The programs and services are planned to meet the needs of all groups and individuals and to furnish support services enabling each student to reach his potential.
Diagnostic Testing Center

The two primary functions of North Lake’s Diagnostic Testing Center are to administer:
- Psychological tests of personality, vocational interests and aptitudes.
- Diagnostic tests which make appropriate class placement possible. These tests are strongly recommended to insure student success.

Testing Center

The two primary functions of North Lake’s Testing Center are to administer:
- Academic testing for the college instructional programs including ITV courses. Many courses are individualized and self-paced, permitting students to be tested at appropriate times.
- National testing programs, including ACT, GED, CLEP, and TOEFL.

Tutoring Services

For students needing special temporary assistance in course work, arrangements for tutoring services can be made through the Counseling Office.
Students are encouraged to seek such services through self referral as well as through instructor referral.

Services for the Handicapped

Services for handicapped students include assistance in securing note-takers, interpreters, mobility aides, and tutors. Programs for handicapped students are coordinated through Student Services.

Counseling Services

Confidential assistance is provided by the counseling staff in any of the following areas:
- Career counseling regarding possible vocational directions to explore, occupational information, or self-appraisal pertaining to job stability and interest.
- Personal-social counseling regarding adjustment within the college community, relating to instructors or to other people, drug matters, marriage counseling or any other concerns which interfere with personal development.
- Small group discussions led by counselors focusing on matters of concern in areas where group feedback can be helpful. Participation in these confidential groups is available as space permits.
- Referral to provide in-depth assistance if necessary for such matters as financial aid, tutoring, job placement, medical or psychiatric problems.
- Testing to provide additional standardized testing information when called for in planning or decision making.
- Tests are available to assess abilities, vocational interests and personality.

Advisement

Academic advisement regarding appropriate course choice, study habits, remedial work or transferring to another college is available through Counseling. Trained
para-professionals also assist the counselors in this function. Students with declared majors should consult with their faculty advisors within their major field of study.

- 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 North Lake.
- Seminars and workshops of a subject-centered nature. Examples are 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.
- Because we are a community centered college, advisement and consultation services are also provided to residents who are not yet enrolled.

The Financial Aid Program is a multi-purpose financial assistance service for students. A major objective is to provide assistance to students who, without such aid, would be unable to attend college. Basic to this philosophy is the belief that the educational opportunities of able students should not be limited by their financial resources.

Requests for information should be directed to the Director of Financial Aid. Students who anticipate the need for financial assistance for college are encouraged to complete an application at least two months prior to registration for the semester they wish to attend. Early application will enable the Financial Aid Office to prepare a realistic financial aid package.

Some of the grant, loan and scholarship programs available to students are outlined in the following paragraphs.

**Basic Educational Opportunity Grant (BEOG).** Students that enroll for at least 6 credit hours are eligible to apply for this "entitlement grant." Applications are available in many federal offices, as well as in the Financial Aid Office, and are mailed directly by the student to a central processing place indicated in the instructions. The student receives a Student Eligibility Report which he brings to the Financial Aid Office for interpretation and determination of grant amount according to an objective table provided to them by the federal government for that purpose.

**Supplemental Educational Opportunity Grant.** This grant is authorized under the Higher Educational Amendments of 1965 and amended by the Educational Amendments of 1976. To be eligible students must demonstrate exceptional need and make satisfactory progress toward the completion of their educational goal. Legislation for the SEOG award includes a matching requirement which specifies that aid equal in amount to the SEOG must be provided to the
student during the award period. The minimum SEOG award permitted is $200 to $1500 per academic year, depending on the needs, and the total number of applicants and funds available. Students must apply each academic year.

Scholarships. North Lake College offers a limited number of scholarships to students who exhibit scholastic ability and/or need. Individuals, private industries and groups make these scholarships available through the Office of Financial Aid.

Hinson-Hazlewood College Student Loan Program. The necessary requirements for this loan are:
1. Legal residence in Texas.
2. Enrolled or accepted for enrollment for at least a half-time course of study.
3. Established financial need.
The amount of loan for which a student may qualify depends upon the income of his family. Married applicants are qualified by considering the income of both husband and wife.
Qualified students may receive up to $1,500 for the nine-month school session.
Repayment begins between 9 and 12 months after the student ceases to be enrolled for at least half the normal course load. Repayment may extend up to 10 years; however, a minimum payment of $30 a month is required. Interest rate is 7 per cent per annum.

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

Bureau of Indian Affairs. For information on educational benefits, an Indian student should contact the nearest BIA office.

Hazlewood Act. Certain veterans who have no remaining V.A. educational benefits can attend Texas state supported institutions with their tuitions and fees waived if they were residents of Texas at the time they entered the services and are now residents of Texas. Contact the Financial Aid office for details.

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

The Texas Education Agency, through the Vocational Rehabilitation Division, offers assistance for tuition and fees to students who are vocationally handicapped as a result of a physically or mentally disabling condition. For further information, contact Vocational Rehabilitation, 4333 North Central Expressway, Dallas, Texas 75205.

The Veterans' Benefits Programs for eligible students is coordinated by the Veterans' Affairs Office.
Services of Veterans' Affairs Office include counseling the
veteran concerning benefits, V.A. Work Study Programs, financial problems, V.A. loans, career counseling and other areas related to the veteran’s general welfare.

When testing indicates that a veteran should enroll in developmental courses such as reading, writing, or math, the student may pursue these courses with no charge to his eligibility. Tutoring services are also available to the veteran who is having learning difficulties in one or more subjects. For assistance in obtaining tutoring benefits, contact the Veterans’ Affairs Office.

The veteran student who enrolls in college should be aware of some of the V.A. guidelines which are enforced. Violation of the following policies will cause complications in receiving, or loss of, monthly benefits:

1. Class attendance is mandatory. Failure to attend class will result in suspension from class.
2. Veteran students who plan to enroll in developmental courses must be tested and show a need in basic skills before enrollment in these courses.
3. A veteran enrolled in T.V. courses must be pursuing more on-campus credit hours than hours taken by T.V.
4. A veteran student who has successfully completed credit hours at another college or university must submit a transcript from that college or university before applying for V.A. benefits. The transcript will be evaluated and credit granted where applicable.
5. Only enroll in courses required for your degree program. Information on degree requirements may be obtained from the Registrar’s Office.
6. A veteran who withdraws or who is dropped from all courses attempted during a semester will be considered as making unsatisfactory progress by the V.A. and may lose future benefits. A veteran student must also maintain a satisfactory grade point average as outlined in the catalog.

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

The Financial Aid Office will assist any student desiring on-campus employment. Typically, this part-time employment is designed as a financial aid to assist students while they are in college through:

1. On-campus placement
2. Work-study programs
3. Off-campus student assistantships

The Placement Office will assist any student desiring help in finding off-campus employment. A placement officer will work directly with students and community employers to locate jobs and students qualified to fill those jobs.

Career placement assistance is available for students nearing completion of their course of study. All students
should register with the Placement Office at least one full semester before graduation.

Career Information. A library of career-related literature, including publications from the Women's Bureau, is also housed in the Placement Office and may be checked out by students. Most of this literature is descriptive, designed to provide general information about definite career fields. The library is cataloged alphabetically by career areas and is continually updated.

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

- Failure to maintain an acceptable academic record.
- Failure to meet the minimum course load requirements.
- Changes in the financial status of the student or his family.
- Any student in violation of any regulation governing the program from which he is receiving aid.
- It is understood that the student is aware of the conditions under which aid is offered and agrees to meet all the necessary requirements.

See page 35 for complete description.

Revocation of Aid

Cooperative Work Experience

Student Development Office

The Student Development Office develops programs that are visualized as an integral part of the learning experience available at the college.

Through Student Development Programs, the student is encouraged to find new ways of expressing himself, to develop skills in relating to other people, to formulate a new understanding of and respect for himself and his environment.

Student-planned activities such as games, tournaments, speakers, dances, films, art shows, entertainers, intramurals, special-interest groups, clubs, and organizations provide opportunities for a more complete experience for each student.

Student Organizations

Designed to complement the routine of the community college student and provide a means for several students to unite in a common interest or goal, North Lake encourages the formation of and membership in clubs and organizations. Membership in these organizations is open to any student regardless of race, creed, color, or sex. Information regarding participation in any organization may be obtained through the Student Development Office. The Director of Student Development will offer full assistance to interested students in the organizing process.

Student Center

The Student Center contains conference rooms and recreational facilities. The Center is open during regular school hours.
Intramurals provide team sports, individual sports and recreational game activities. Interested students should contact the Intramural Director in the Physical Education area.

Participation is available on athletic teams for all full-time students on a voluntary non-scholarship basis who meet additional requirements established by the Metro Athletic Conference.

The College Council includes students, faculty, staff, and administrators. All have a vested interest in the school and are therefore entitled and urged to participate in its operation.

The College Council allows the total college population to share in the decision-making process and is composed of the following elements: President's Forum, Commissions, and Ad Hoc committees.

The College student is considered a responsible adult. The student's enrollment indicates acceptance of those standards of conduct which appear on page 113.

The Health Center provides health counseling and education as well as emergency and first aid care.

Confidentiality is maintained. No information is released without written permission from the student. The Health Center refers students to the appropriate outside source for additional treatment if necessary. Each student is responsible for his own transportation.

A small library is maintained containing health-related materials not available in the main library.

The Health Center is staffed with registered nurses and a physician is on call at all times.

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

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

Additional information concerning the parking and traffic code enforced by the College Department of Safety and Security is included in the student discipline and conduct code in this catalog.
EDUCATIONAL PROGRAMS AND SERVICES

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

The academic transfer curriculum is coordinated with senior colleges and universities to facilitate the transfer of credits to these schools. See page 19 for further information.

The College offers a variety of technical/occupational programs which enable students to enter their chosen field as skilled employees after one or two years of college work.

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

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

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

Recommendations for adding new programs to the College offerings will be made periodically based on community studies which identify additional training needs.

Technical/occupational courses carry college credit leading to a Certificate of Completion or an Associate in Applied Arts and Sciences Degree.

Students may enrich their education in certain career programs by enrolling in Cooperative Work Experience Education courses. These courses are designed to assist students in coordinating classroom study with related on-the-job experience.

Requirements:

- Students must have completed at least two courses in their occupational major to be eligible for Cooperative Work Experience.
- A full-time student must be enrolled in twelve credit hours or more; two courses must relate to the student's work experience, and up to four credit hours may be in Cooperative Work Experience.
- A part-time student may take up to four credit hours of work experience.
- Part-time students must be concurrently enrolled in a course related to their work experience.
- To enroll in a Cooperative Work Experience course, students must have the approval of their instructor/coordinator.
Evening and Weekend College

In dynamic, growing communities such as those encompassing our college, people are involved. Their community and work involvement often creates a need to develop new knowledge and skills. These involvements may render it impossible for them to attend college during normal daytime hours. The Evening and Weekend College program offers these people the same broad spectrum of credit educational programs that is available to full-time day students. Courses are currently offered Monday through Thursday nights and on Saturdays, both on-campus and off-campus at selected community locations (usually public school buildings). As the need warrants, classes will also be scheduled on Friday nights and on Sundays.

The College's long range goal is to provide an evening and weekend program of on-campus, off-campus, and telecourse instruction which is sufficiently comprehensive to enable a student to complete a degree or certificate program through attendance only during these periods.

The evening and weekend program offers high quality instruction, excellent facilities, and a variety of student services, including counseling, health, library, bookstore, food service, financial aid, and recreation. Instructors in the evening and weekend program are selected from full-time staff and from outstanding Dallas area educators and other professional specialists who are interested in teaching.

To enroll in the evening/weekend program, call or write the Director of Admissions. Information may also be obtained by contacting the Evening Administration Office.

Telecourses

The College offers a variety of college credit courses via television. The schedule of telecourses, which varies each semester, may include courses in anthropology, astronomy, business, earth science, ecology, biology, English, economics, government, history, humanities, and psychology. Content and credit for these courses are the same as for similar courses taken on campus. Telecourses include the viewing of television programs on KERA Channel 13 each week, plus reading, study guide, and writing assignments. Students come to the campus for an orientation session at the beginning of the semester, for one to four discussion meetings, for three or four tests, and for laboratory sessions as appropriate for lab science courses during the semester. These visits to the campus are normally scheduled so that they may be attended at a time convenient to the student.

Telecourses may be taken as part of a student’s total credit load or as the only course in which the student is enrolled. Registration for telecourses may be accomplished by mail or as part of the regular on-campus registration procedures.

Community Service Division

Community Service programs are an important element in the college’s commitment to “community” and providing educational opportunities to everyone.

Community Service means many things to many people, but at North Lake it means short-term courses, seminars,
workshops, institutes, clinics, conferences, demonstrations and organized continuing education programs on a non-credit basis. Courses are designed and generated in response to the requests and needs expressed by the community and its members.

Additionally, certain community service courses may be applied toward the General Studies Degree. See page 20 for a more detailed description of this degree option.

Generally, there are no entrance requirements or examinations, although certain courses may have age restrictions or may indicate a certain amount of experience is necessary for enrollment. Admission is on a first come, first served basis. All you need to do to register is fill out the form and pay the fee.

Classes and activities are held throughout the year on campus and in a variety of locations throughout our service area. Most of the classes and activities are conducted on weekday evenings, but many are also available on weekdays and on weekends. The community service program is designed so that individuals may explore new fields of study, increase proficiency in a profession, develop a potential, and enrich lives through cultural and recreational studies. Such a program offers opportunities for lifelong learning, continuing education, cultural and community enrichment, personal entertainment and recreation, and resources for industry, government, and professional groups.

Efforts are made to include classes for all interests and age groups. New courses and programs are added regularly, many created by suggestions from past, present, and potential students who take an active part in the planning process. You are welcome to share your ideas and suggestions with us.

Courses are offered in such areas as real estate; personal money management; business and management; office occupations; vocations and trades; visual arts and crafts; human development; women's programs; special interest; sports, health, and recreation; horticulture; cooking, sewing, and interior decorating; music, dance, and theatre; English and foreign languages; communications; and programs for children and youth.

Community Service instructors are professional men and women from business and industry, government, social service agencies, the community, college faculty and staff, and other educators with outstanding background experience in their fields.

Tailor-made non-credit courses, specifically designed to meet the needs of business, industry, and other organizations and agencies, can be offered either on-campus or in-house. Contact us if your firm or organization has a need or interest we can meet in this fashion.

The full range of student services, with the exception of financial aid, is available to community service students.
CURRICULUM

Divisions of the College

BUSINESS & MANAGEMENT DIVISION
- Accounting
- Banking & Finance
- Bookkeeping
- Computer Science
- Distribution Technology
- Economics
- General Business
- Legal Secretarial
- Office Occupations
- Mid-Management
- Real Estate
- Secretarial Careers
- Small Business Management

SCIENCE/MATHEMATICS/TECHNOLOGY DIVISION
- Air Conditioning & Refrigeration
- Astronomy
- Biology
- Blueprint Reading
- Building Trades
- Carpentry
- Electricity
- Chemistry
- Developmental Mathematics
- Diesel Mechanics
- Earth Science
- Geology
- Geography
- Mathematics
- Physics

SOCIAL SCIENCES/PHYSICAL EDUCATION DIVISION
- Anthropology
- Government
- History
- Psychology
- Religion
- Social Science
- Sociology

COMMUNICATIONS/HUMANITIES DIVISION
- Art
- College Learning Skills
- Communications
- Developmental Reading
- Developmental Writing
- English
- French
- Humanities
- Journalism
- Music
- Philosophy
- Photography
- Spanish
- Speech
- Theatre
In the following list of courses, the credit value in semester units is indicated following the course number.
Courses numbered 100 or above are applicable to the associate degrees. Courses numbered below 100 are developmental in nature. The student is urged to consult his or her counselor or specific college catalogs for information regarding transferability of courses to four year institutions.
Course prerequisites may only be waived by the appropriate division chairman.
All courses listed in this catalog may not be offered during the 1978-1979 academic year.

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**Course Descriptions**

**Air Conditioning/Refrigeration**

400 Basic Electricity 6 Cr., 180 Contact Hrs.
Fundamentals of electricity as applied to domestic appliances, residential, commercial and industrial air conditioning. Laboratory fee required.

401 Basic Units of Measurement and Measuring Devices 1 Cr., 30 Contact Hrs.
Calculating and measuring volts, ohms, current and watts. Laboratory fee required.

402 Simple Schematics and Circuits 1 Cr., 30 Contact Hrs.
How to construct and interpret simple schematic diagrams; construct simple circuits. Laboratory fee required.

403 Circuit Components 1 Cr., 30 Contact Hrs.
Construction and diagnosis of circuits using switches, relays, solenoids, thermostats and protective devices. Laboratory fee required.

404 Complex Schematics and Circuits 2 Cr., 60 Contact Hrs.
How to interpret and construct complex schematics; construct complex circuits. Laboratory fee required.

405 A.C. Motor Fundamentals 1 Cr., 30 Contact Hrs.
Commonly used A.C. motors, their starting and protective devices. Laboratory fee required.

410 Basic Refrigeration 10 Cr., 300 Contact Hrs.
Principles of refrigeration as applied to domestic refrigeration, commercial refrigeration, residential and industrial air conditioning. Laboratory fee required.

411 Elementary Thermodynamics 1 Cr., 30 Contact Hrs.
Principles of thermodynamics, physics and gas laws as applied in basic refrigeration. Laboratory fee required.

412 Heat Transfer and Air Properties 1 Cr., 30 Contact Hrs.
Principles of heat flow, heat transfer, load calculations, plotting and interpreting the psychrometric chart. Laboratory fee required.

413 Refrigerants and Refrigerant Properties 1 Cr., 30 Contact Hrs.
Types of refrigerant and properties of each type. Laboratory fee required.

414 The Vapor Compression System and Accessories 3 Cr., 90 Contact Hrs.
The four processes, the major components of the vapor compression cycle and the relationship and function of each. Laboratory fee required.

415 Piping and Fittings 1 Cr., 30 Contact Hrs.
Pipe sizing, construction and repair of piping; soldering and silver brazing. Laboratory fee required.

416 Leak Detection, Leak Repair and Evacuation 1 Cr., 30 Contact Hrs.
Basic refrigeration leak detection methods, repair and repair materials and evacuation. Laboratory fee required.

417 The Pressure-Enthalpy Diagram 1 Cr., 30 Contact Hrs.
Construction and interpretation of the pressure-enthalpy diagram. Laboratory fee required.
418 Charging and Discharging the System 1 Cr., 30 Contact Hrs.
Discharge and charge the refrigerant system; check the refrigerant charge. Laboratory fee required.

419 Electric Motors 1 Cr., 30 Contact Hrs.
Diagnose, service, repair and/or replace electric motors used in residential cooling systems. Laboratory fee required.

420 Residential A/C Units — Cooling 12 Cr., 360 Contact Hrs.
Diagnose, service, repair and/or replace mechanical and electrical component parts of residential cooling systems; check system performances. Laboratory fee required.

421 Properties of Air 1 Cr., 30 Contact Hrs.
How to measure air properties, plot and interpret psychrometric charts. Laboratory fee required.

422 Heat Transfer and the Cooling Load 1 Cr., 30 Contact Hrs.
Identify heat sources and calculate the cooling load on the system. Laboratory fee required.

423 The Refrigeration System — Residential Cooling 3 Cr., 90 Contact Hrs.
Check, service, repair and/or replace compressors, condensers, evaporators and metering devices. Laboratory fee required.

424 Refrigerant Circuit Piping 1 Cr., 30 Contact Hrs.
Construct and repair refrigerant circuit piping; install driers and sight glasses. Laboratory fee required.

425 Leak Detection, Leak Repair and Evacuation — Residential Cooling 1 Cr., 30 Contact Hrs.
Leak detection methods, repair materials, leak repairs and evacuation applied to residential cooling systems. Laboratory fee required.

426 Introduction to Condensing Water Systems 1 Cr., 30 Contact Hrs.
Water towers, water treatment, circulating pumps and water cooled condensers. Laboratory fee required.

427 Air Distribution — Residential Cooling 1 Cr., 30 Contact Hrs.
Check, service and adjust filters, flow patterns, velocity and volume. Laboratory fee required.

428 System Performance and the Refrigerant Charge 1 Cr., 30 Contact Hrs.
Evaluate system performance compared to system load, check refrigerant charge, construct and interpret P-H diagram. Laboratory fee required.

429 Complex Electrical Circuits 1 Cr., 30 Contact Hrs.
Diagnose, repair and/or replace components of the electrical system. Laboratory fee required.

430 Residential A/C Units — Heating 8 Cr., 240 Contact Hrs.
Diagnose, service, repair and/or replace mechanical and electrical component parts of residential heating systems; check system performance. Laboratory fee required.

431 Air Properties and Load Calculations 1 Cr., 30 Contact Hrs.
Calculate the heating load, construct and interpret psychrometric charts, humidity control. Laboratory fee required.

432 The Warm Air Furnace — Gas 2 Cr., 60 Contact Hrs.
Check, service, repair and/or replace heat exchangers, burner assemblies, control and protective devices. Laboratory fee required.

433 The Warm Air Furnace — Electric 1 Cr., 30 Contact Hrs.
Check, repair and/or replace electric strip heating assemblies, control and protective devices. Laboratory fee required.

434 Air Distribution — Residential Heating 1 Cr., 30 Contact Hrs.
Check, service, adjust, repair and/or replace blower assembly components; check, service and adjust filters, flow patterns, velocity and volume. Laboratory fee required.

435 The Heat Pump 1 Cr., 30 Contact Hrs.
Service and repair of the heat pump. Laboratory fee required.
436 **The Electrical Circuit and Schematics**  
1 Cr., 30 Contact Hrs.  
Construct and interpret schematics; diagnose, repair and/or replace electrical circuit components. Laboratory fee required.

437 **Electric Motors and Starting Devices — Residential Heating**  
1 Cr., 30 Contact Hrs.  
Diagnose, service, repair and/or replace electric motors and starting devices used in residential heating. Laboratory fee required.

440 **Residential Systems Design**  
6 Cr., 180 Contact Hrs.  
How to make load calculations, select equipment and design air distribution systems. Laboratory fee required.

441 **Structural Blueprints**  
1 Cr., 30 Contact Hrs.  
How to read and interpret structural blueprints. Laboratory fee required.

442 **Load Calculations — Heating**  
1 Cr., 30 Contact Hrs.  
Calculate the heat load for the heating equipment. Laboratory fee required.

443 **Load Calculations — Cooling**  
1 Cr., 30 Contact Hrs.  
Calculate the cooling load of structure, people, equipment, etc., for the cooling equipment. Laboratory fee required.

444 **Equipment Selection and Locating**  
1 Cr., 30 Contact Hrs.  
Select and locate the heating equipment, cooling equipment and air handling equipment. Laboratory fee required.

445 **Air Distribution System Design**  
2 Cr., 60 Contact Hrs.  
Design of supply and return duct systems, selection of registers and diffusers. Laboratory fee required.

449 **Electric Motors and Starting Devices — Commercial Refrigeration**  
1 Cr., 30 Contact Hrs.  
Diagnose, service, repair and/or replace electric motors and starting devices used in commercial refrigeration systems. Laboratory fee required.

450 **Commercial Refrigeration**  
12 Cr., 360 Contact Hrs.  
How to check, service, adjust, repair and/or replace components of a commercial refrigeration system. Laboratory fee required.

451 **Refrigeration Systems — Commercial Refrigeration**  
3 Cr., 90 Contact Hrs.  
Check, service, adjust, repair and/or replace components of the refrigeration circuit. Laboratory fee required.

452 **Multiple Systems**  
1 Cr., 30 Contact Hrs.  
Check, service, repair and/or replace components of multiple systems. Laboratory fee required.

453 **Piping and the Refrigerant Circuit — Commercial Refrigeration**  
1 Cr., 30 Contact Hrs.  
Check, service, repair and/or replace piping and components of the refrigerant circuit. Laboratory fee required.

454 **Flow Control and Pressure Control Devices**  
1 Cr., 30 Contact Hrs.  
Diagnose, adjust, repair and/or replace flow control and pressure control devices. Laboratory fee required.

455 **Moisture Problems and Defrost Systems**  
1 Cr., 30 Contact Hrs.  
Check, adjust, repair and/or replace defrost devices; check air properties. Laboratory fee required.

456 **Load Calculations — Commercial Refrigeration**  
1 Cr., 30 Contact Hrs.  
Check and calculate system loads. Laboratory fee required.

457 **The Refrigerant Charge and System Performance**  
1 Cr., 30 Contact Hrs.  
Check and adjust system balance point; check system performance compared to system load; check and install the correct refrigerant charge. Laboratory fee required.
Leak Detection, Leak Repair and Evacuation — Commercial Refrigeration 1 Cr., 30 Contact Hrs. Locate and repair refrigerant leaks; evacuate for the refrigerant charge applied to commercial refrigeration system. Laboratory fee required.

The Electrical Circuit and Control Devices — Commercial Refrigeration 1 Cr., 30 Contact Hrs. Diagnose, adjust, repair and/or replace component parts of the electrical circuit and control devices for commercial refrigeration systems. Laboratory fee required.

Industrial Air Conditioning 14 Cr., 420 Contact Hrs. How to check, service, adjust, repair and/or replace components of an industrial air conditioning system. Laboratory fee required.

Absorption Systems 1 Cr., 30 Contact Hrs. Diagnose, service and repair components of the absorption system. Laboratory fee required.

Vapor Compression Systems 3 Cr., 90 Contact Hrs. Diagnose, service, adjust, repair and/or replace components of the vapor compression system. Laboratory fee required.

Multiple Systems, Flow Control and Pressure Control Devices 1 Cr., 30 Contact Hrs. Check, service, repair and/or replace components of multiple systems, flow control and pressure control devices. Laboratory fee required.

Applied Psychrometrics and System Performance 1 Cr., 30 Contact Hrs. Check air properties, plot, interpret and apply information from the psychrometric chart; evaluate system performance, install the correct refrigerant charge. Laboratory fee required.

Air Distribution — Industrial Air Conditioning 1 Cr., 30 Contact Hrs. Check and adjust air distribution patterns, volume and velocity. Laboratory fee required.

Leak Detection, Leak Repair and Evacuation — Industrial Air Conditioning 1 Cr., 30 Contact Hrs. Locate and repair refrigerant leaks; evacuate for the refrigerant charge applied to industrial air conditioning systems. Laboratory fee required.

Piping and the Refrigerant Circuits — Industrial Air Conditioning 1 Cr., 30 Contact Hrs. Making piping repairs, condenser water piping and refrigerant circuit piping. Laboratory fee required.

Electrical Circuits and Control Devices — Industrial Air Conditioning 1 Cr., 30 Contact Hrs. Diagnose, adjust, repair and/or replace components of the electrical circuit and control devices for industrial air conditioning systems. Laboratory fee required.

Pneumatic Control Systems 1 Cr., 30 Contact Hrs. Check, service, adjust, repair and/or replace components of a pneumatic control system. Laboratory fee required.

Boilers — Combustion Process 1 Cr., 30 Contact Hrs. Check, service, repair and/or replace combustion components of boilers. Laboratory fee required.

Boiler Electrical Circuits 1 Cr., 30 Contact Hrs. Diagnose, adjust, repair and/or replace components of a boiler electrical circuit. Laboratory fee required.

Hydronic Systems 1 Cr., 30 Contact Hrs. Check, service, adjust, repair and/or replace components of a hydronic system. Laboratory fee required.

(See Cooperative Work Experience) 3 Cr.

(See Cooperative Work Experience) 4 Cr.

(See Cooperative Work Experience) 3 Cr.

(See Cooperative Work Experience) 4 Cr.
100 Introduction to Anthropology 3 Cr., 3 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.

101 Cultural Anthropology 3 Cr., 3 Lec.
A survey of the cultures of the world with emphasis on those of North America. The concept of culture, social and political organization, language, religion and magic, elementary anthropological theory. (This course is offered on campus and may be offered via television.)

103 Introduction to Art 1 Cr., 3 Lab.
An introduction to materials and techniques of studio art for the non-major, involving basic design concepts and traditional media. Laboratory fee required.

104 Art Appreciation 3 Cr., 3 Lec.
Films, lectures, slides and discussions on the theoretical, cultural and historical aspects of the visual arts. Attempts to develop visual and aesthetic awareness, thus relating art to the student as an individual.

105 Survey of Art History 3 Cr., 3 Lec.
This course covers the chronological sequence of art from the prehistoric through the Renaissance. Explores the cultural, geophysical and personal influences on art styles, offering the student a broader range of ideas which will enable him to relate the past to his own work and provide stimuli for his future works.

106 Survey of Art History 3 Cr., 3 Lec.
This course covers the chronological sequence of art from the Baroque through the present. Explores the cultural, geophysical and personal influences on art styles, offering the student a broader range of ideas which will enable him to relate the past to his own work and provide stimuli for his future works.

110 Design I 3 Cr., 2 Lec., 4 Lab.
A study of basic concepts of design using two-dimensional materials. Use of line, color, illusion of space or mass, texture, value, shape and size in composition. Required of all art and interior design majors. Open to all interested students.

111 Design II 3 Cr., 2 Lec., 4 Lab.
A study of basic concepts of design with three-dimensional materials, using mass, space, movement and texture. Required of all art majors. Open to all interested students. Laboratory fee required.

114 Drawing I 3 Cr., 2 Lec., 4 Lab.
A beginning course investigating a variety of media, techniques and subjects which explores perceptual and descriptive possibilities with consideration of drawing as a developmental process as well as an end in itself. Required of all art majors. Open to others who are interested.

115 Drawing II 3 Cr., 2 Lec., 4 Lab.
Prerequisite: Art 114. Expansion of Drawing I stressing the expressive and conceptual aspects of drawing including the human figure within a spatial environment. Required of all art majors. Open to others who are interested.

116 Introduction to Jewelry I 3 Cr., 2 Lec., 4 Lab.
Prerequisites: Art 110, Art 111, or permission of instructor. The basic techniques of fabrication and casting of metals, with emphasis on original design. Laboratory fee required.
117 Introduction to Jewelry II 3 Cr., 2 Lec., 4 Lab.
   Prerequisite: Art 116. A continuation of Jewelry I. The study of advanced fabrication and casting techniques, with emphasis on original design. Laboratory fee required.

118 Creative Photography for the Artist I 3 Cr., 2 Lec., 4 Lab.
   Prerequisites: Art 110, Art 114 or consent of the instructor. Creative use of the camera and photosensitive materials as a means of making expressive graphic images. Emphasis will be upon black and white, processing and printing techniques. Laboratory fee required.

119 Creative Photography for the Artist II 3 Cr., 2 Lec., 4 Lab.
   Prerequisite: Art 118 or consent of instructor. A continuation of Art 118 with emphasis upon color processing and printing techniques. Laboratory fee required.

199 Art Seminar 1 Cr., 1 Lec.
   A one hour weekly lecture and seminar where area artists, critics and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements, as well as the specifics of being artists in our contemporary society.

201 Drawing III 3 Cr., 2 Lec., 4 Lab.
   Prerequisites: Art 110, Art 111, Art 115, sophomore standing and/or permission of the division chairman. Analytic and expressive drawing of the human figure, stressing study of movement and volume. Laboratory fee required.

202 Drawing IV 3 Cr., 2 Lec., 4 Lab.
   Prerequisite: Art 201, sophomore standing and/or permission of the division chairperson. A continuation of Art 201 with emphasis on individual expression. Laboratory fee required.

203 Art History 3 Cr., 3 Lec.
   Prerequisites: Art 105 and Art 106. Chronological study of the development of the art of Western Man during the Renaissance Period. Emphasis on development of Renaissance art in Northern and Southern Europe.

204 Art History 3 Cr., 3 Lec.
   Prerequisites: Art 105 and Art 106. A chronological study of the development of the art of Western Man from late 19th century through today. Emphasis on development of modern art in Europe and America.

205 Painting I 3 Cr., 2 Lec., 4 Lab.
   Prerequisites: Art 110, Art 111, Art 115 or permission of the instructor. A studio course stressing fundamental concepts of painting with acrylics and/or oils. Emphasis on painting from still life, models and the imagination.

206 Painting II 3 Cr., 2 Lec., 4 Lab.
   Prerequisite: Art 205. Continuation of Art 205 with emphasis on individual expression.

208 Sculpture I 3 Cr., 2 Lec., 4 Lab.
   Prerequisites: Art 110, Art 111, Art 115 or permission of the instructor. An exploration of various sculptural approaches in a variety of media and using different techniques. Laboratory fee required.

209 Sculpture II 3 Cr., 2 Lec., 4 Lab.
   Prerequisite: Art 208. A continuation of Sculpture I with emphasis on individual expression. Laboratory fee required.

210 Commercial Art I 3 Cr., 2 Lec., 4 Lab.
   Prerequisites: Art 110, Art 111, Art 115 or consent of the instructor. An introduction to the working world of commercial art with emphasis on the acquisition of professional attitudes and basic studio skills through the working out of typical commercial assignments. Laboratory fee required.

211 Commercial Art II 3 Cr., 2 Lec., 4 Lab.
   Prerequisite: Art 210. A continuation of Art 210 with added emphasis on layout and design concepts through increased individual
assignments, work with simple art for reproduction techniques and the development of a professional portfolio. Laboratory fee required.

212 Advertising Illustration 3 Cr., 2 Lec., 4 Lab.  
Prerequisite: Art 210. Problems of the illustrator are investigated while exploring the elements he uses. Projects involving basic solution to contemporary illustration are developed.

215 Ceramics I 3 Cr., 2 Lec., 4 Lab.  
Prerequisites: Art 110, Art 111, Art 115 or permission of instructor. Building of pottery forms by coil, slab and use of wheel; glazing and firing. Laboratory fee required.

216 Ceramics II 3 Cr., 2 Lec., 4 Lab.  
Prerequisite: Art 215 or permission of instructor. A study of glaze technology and advanced problems in the creation of sculptural and utilitarian ceramic ware. Laboratory fee required.

228 Three Dimensional Design 3 Cr., 2 Lec., 4 Lab.  
Prerequisites: Art majors, Art 110, Art 111 and Art 114. Drafting Technology majors - Drafting 183 and Engineering 186. Development of three-dimensional projects in metal, plastic, and wood through the stages of design: idea, sketches, research, working drawing, model and finished product. Emphasis is on function, material and aesthetic form. Laboratory fee required.

101 Descriptive Astronomy 3 Cr., 3 Lec.  
A descriptive course consisting of a survey of the fundamentals of astronomy. Emphasis on the solar system, including a study of the celestial sphere, the earth’s motions, the moon, planets, asteroids, comets, meteors and meteorites. (This course is offered on campus and may be offered via television.)

Astronomy

102 General Astronomy 3 Cr., 3 Lec.  
A course emphasizing stellar astronomy which includes a study of the sun, the properties of stars, star clusters, nebulae, interstellar gas and dust, the milky way galaxy and external galaxies.

Banking and Finance

103 Credit Management 3 Cr., 3 Lec.  
Prerequisite: Credit and Collection Principles. Working methods of credit management and control are developed and applied to cases that involve making credit decisions, fixing credit limits, handling complicated accounts, adjustments, extensions, composition settlements, assignments, reorganizations and bankruptcies. Stress is laid upon credit and financial analysis relating to profitability, capacity to pay debts and provide essential services, and ability to withstand adversity. Trade credit is examined as a commitment of corporate assets.

104 Introduction to Banking 3 Cr., 3 Lec.  
This course presents broad basic fundamentals of bank functions in a descriptive fashion so that the student may acquire an operational perspective of banking services offered.
104 Money and Banking 3 Cr., 3 Lec.
This course presents the basic economic principles most closely related to the subject of money and banking. The course stresses the practical application of the economics of money and banking to the financial institution. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money; bank investments, loans, earnings and capital; the federal reserve system and its policies and operations; treasury department operations; and the changing international monetary system.

105 Comparative Financial Institutions 3 Cr., 3 Lec.
The nature, functions and relationships of financial institutions, money markets and capital markets. An investigation of the role, characteristics and operations of banking, savings and loan and financial credit institutions, their similarities, differences, capabilities, customer orientation and effect of state and federal regulatory agencies on operations.

106 Introduction to the Savings Association Business 2 Cr., 2 Lec.
This survey course introduces students to the modern business world and to the role of savings associations. Savings associations' historical development, present-day organization, competition and future direction are presented and students acquire a solid foundation for more specialized courses of study.

107 Savings Association Operations 2 Cr., 2 Lec.
An overview of the internal operations of a savings association, this course surveys the work done throughout the institution; outlines the responsibilities of various departments, and illustrates the inter-relationship of all job assignments.

110 Federal Reserve System 3 Cr., 3 Lec.
This course examines the operations and policies of the federal reserve system. Attention is given to international monetary affairs, especially the changing role of gold, economic developments and goals which affect the stability of the American economy, and federal reserve efforts to adapt and influence the changing economic environment.

111 Trust Functions and Services 3 Cr., 3 Lec.
This course presents a complete picture of the services rendered by institutions engaged in trust business. Topics covered are the history of trust services and institutions, trust powers and government supervision, trust department services, property, wills, settlement of estates, personal and insurance trusts, personal agencies, guardianship, employee benefits trusts, corporate trusts and agencies, investment of trust funds, and management of property and mortgages.

112 Installment Credit 3 Cr., 3 Lec.
This course emphasizes the details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance, and rate structure and yields.

113 Credit Card Banking 3 Cr., 3 Lec.
This course is designed to assist students in understanding the overall aspect of operating a bank charge plan. It briefly touches on marketing of credit cards.

114 Teller Training 3 Cr., 2 Lec., 1 Lab.
An intensive concentrated course of study and practical hands-on experience designed to train tellers in the basics of teller operations. Topics covered include: fundamentals of negotiable instruments, introduction to the care and handling of money, deposits, checking and savings transactions, special teller functions and balancing, cashing and paying checks. The importance of public relations in the teller's job, security measures, fraud and robbery are also covered.

115 Credit and Collection Principles 3 Cr., 3 Lec.
This is a basic course in credit and collections. The topics studied include the nature and function of credit, types and classification of
credit, principles of bank and commercial credit, factors of credit risk, sources of information, analysis of agency reports, interchange services, and collection procedures.

116 Construction Lending 1 Cr., 1 Lec.
The course provides a broad overview of construction lending in commercial banks and covers such topics as analysis of applications, permanent financing, construction loan participations and servicing; commitment procedures, bonding and developer guarantees, advances, inspections, legal work, unsecured construction financing, land and development loans, and bank relationships with mortgage bankers.

117 Letters of Credit 2 Cr., 2 Lec.
The subjects covered include shipping documents, mechanics of letters of credit, payment and reimbursement, and document examination.

118 Installment Loan Interviewer 1 Cr., 1 Lec.
This course will introduce the student to proper techniques to use when interviewing a loan customer. Topics covered include Reg. B requirements and how to handle “problem” customers. Role playing will be used.

119 New Accounts 1 Cr., 1 Lec.
A survey of basic problems working with new bank accounts. It describes how the new account function interrelates with marketing and covers such legal questions as: who can open an account; what documents are necessary to open an account; does federal law require social security number or tax identification number; the legal rights of survivorship upon the death of one of the signers.

120 Selling Bank Services 1 Cr., 1 Lec.
This seminar teaches how to recognize and meet bank customers’ needs — checking accounts, savings accounts, savings services, loans to individuals, safe deposit, travelers checks, and cross-selling. Extensive use of role play and programmed instruction.

121 Loss Prevention 1 Cr., 1 Lec.
This seminar focuses on check examination and cashing, check swindles, identification with and without credentials, bank holdups, and security procedures.

122 Safe Deposit 1 Cr., 1 Lec.
This seminar is for persons interested in safe deposit operations and who want to become more effective on the job. Safe deposit security legal concerns, access, insurance, contracts, powers of attorney, customer relations, recordkeeping, and safekeeping procedures are some of the topics discussed.

123 Loan and Discount 1 Cr., 1 Lec.
This seminar teaches the essential facts about promissory notes, including calculating interest and discounting commercial paper, guarantees; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concepts of attachment, perfection, priority, default, and foreclosure. The seminar uses programmed instruction and several simulation exercises.

124 Stocks and Bonds 1 Cr., 1 Lec.
Among the topics covered are what stocks and bonds are and how they function; how to transfer ownership; the classes and kinds of stocks, bonds, and government securities.

125 Savings Association Lending 3 Cr., 3 Lec.
This course introduces students to lending operations of savings associations and concentrates on procedures for handling conventional one-to-four family mortgage loans, home improvement loans and mobile home loans. Specialized areas of savings association lending, including large scale mortgage loans, the role of government in home financing, the management of real estate owned, and whole loan sales and participations are also studied.
201 Advanced Credit Analysis 3 Cr., 3 Lec.
Prerequisite: Credit and Collection Principles. The techniques of credit decision-making are studied in detail. The methods of financial analysis, such as ratio calculation, cash flow determination and comparative analysis, are discussed and applied, through case method, to the solution of business problems. Risk appraisal is also studied in the light of general economic conditions, the natures of particular businesses, and the conditions and trends in various industries.

203 Public Relations and Marketing of Financial Services 3 Cr., 3 Lec.
This course is designed to present the student with a practical working knowledge of the role and importance of public relations to the finance industry, both collectively and as applied to individual institutions, e.g., commercial banks, savings and loan associations, credit unions and other financial organizations. Emphasis is also placed on the promotion and marketing of financial services and evaluation of comparative marketing tactics and strategies.

205 Analyzing Financial Statements 3 Cr., 3 Lec.
Prerequisite: Business 201. This course includes characteristics of financial statements and financial statement analysis. Goals, methods, and tools of analysis; analysis of profit and loss, accounts receivable, inventories, and balance sheets; the relationship of balance sheet accounts to sales; and projected statements and cash budgets.

206 Negotiable Instruments and the Payments Mechanism 3 Cr., 3 Lec.
The aim is to improve understanding of how the law operates within the framework of federal and state banking statutes, court decisions, and administrative regulations. Legal situations that occur in the deposit, collection, dishonor and return, payment of checks and other cash items, and the relationship of the various parties in bank collection channels are explored, as are relationships between a bank and its depositor and some of the legal aspects of other bank service operations.

207 Savings Account Administration 2 Cr., 2 Lec.
This course describes the insuring agency, the insurance contract and insurance coverage of savings accounts; explains procedures involved in opening savings accounts; defines problem areas and routine procedures for handling inactive or dormant accounts, loans secured by savings accounts, and creditor actions in reaching debtors' accounts; describes the relationship of liquidity levels and savings withdrawals as used by association financial managers; defines association terms appropriate for advertising of savings accounts and describes additional services to savers.

101 General Biology 4 Cr., 3 Lec., 3 Lab.
This course is a prerequisite for all higher level biology courses and should be taken in sequence. Recommended for science majors. Emphasis is structure and function at the cell, tissue and organ system levels of organization in both plants and animals. Laboratory fee required.

102 General Biology 4 Cr., 3 Lec., 3 Lab.
This course is a continuation of Biology 101. Emphasis is Mendelian and molecular genetics, evolutionary mechanisms, plant and animal development and the energetics and regulation of ecological communities. Laboratory fee required.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lectures</th>
<th>Laboratory</th>
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</thead>
<tbody>
<tr>
<td>115</td>
<td>Biological Science</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>3 Lab.</td>
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<td></td>
<td>A presentation of selected topics in biological</td>
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<td>science for the non-science major including</td>
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<td>the cell concept, basic chemistry as it relates</td>
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<td>to biology, an introduction to genetics,</td>
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<td>cellular processes such as mitosis, meiosis,</td>
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<td>respiration, photosynthesis and plant and animal</td>
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<td>reproduction. Laboratory fee required. (This</td>
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<td>116</td>
<td>Biological Science</td>
<td>4 Cr.</td>
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<td>No prerequisite. A study of selected topics of</td>
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<td>biological science for the non-science major</td>
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<td>including all systems of the human body, drug</td>
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<td>abuse and aging, evolution, ecology and man in</td>
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<td>relation to his environment. Laboratory fee</td>
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<td>120</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>2 Lab.</td>
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<td></td>
<td>The first semester of a two semester course in</td>
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<td>anatomy and physiology, introducing the normal</td>
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<td>structure of the human body, its cells, organs,</td>
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<td>systems, and the functioning of these units.</td>
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<td>This course serves as a foundation for present</td>
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<td>and future specialization for students of A.D.</td>
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<td>Nursing and Allied Health Disciplines. Other</td>
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<td>students interested in the study of the</td>
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<td>functioning of the human body should consult a</td>
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<td>counselor. No science background is presupposed.</td>
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<td>Thorough grounding in the basic chemistry of</td>
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<td>life processes, cell theory, genetics, embryo-</td>
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<td>logy and anatomy and physiology will be provided.</td>
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<td>Coordination of body systems for integral</td>
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<td>functioning will be stressed. Laboratory fee</td>
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<td>121</td>
<td>Introduction to Human Anatomy and Physiology</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>2 Lab.</td>
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<td>Prequisite: Biology 120. A continuation of</td>
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<td>Biology 120. Laboratory fee required.</td>
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<td>203</td>
<td>Intermediate Botany</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>3 Lab.</td>
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<td>Prequisites: Biology 101 and 102. A survey of the</td>
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<td>major plant groups with emphasis placed on</td>
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<td>morphology, physiology, classification, life</td>
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<td>cycles and evolutionary relationships to each</td>
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<td>other and their economic importance to man.</td>
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<td></td>
<td>Recommended for science majors. Laboratory fee</td>
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<td>216</td>
<td>General Microbiology</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>4 Lab.</td>
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<td>Prequisite: Biology 102 or consent of instructor.</td>
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<td>A study of microbes with emphasis on growth,</td>
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<td>reproduction, nutrition, genetics and ecology or</td>
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<td>micro-organisms. Laboratory activities will</td>
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<td>constitute a major part of the course. Recommended</td>
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<td>for science majors and science related programs.</td>
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<td></td>
<td>Laboratory fee required.</td>
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<td>221</td>
<td>Anatomy and Physiology I</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>3 Lab.</td>
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<td>Prequisite: Biology 102 or approval of instructor.</td>
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<td>Recommended for science majors. First course of</td>
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<td>a two course sequence. Structure and function as</td>
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<td>related to the human skeletal, muscular and</td>
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<td>circulatory system. Emphasis placed on the</td>
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<td>inter-relationships of these systems. Laborato-</td>
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<td>ry fee required.</td>
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<td>222</td>
<td>Anatomy and Physiology II</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>3 Lab.</td>
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<td>Prequisite: Biology 221 or approval of instructor.</td>
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<td>Second course of a two course sequence. Structure</td>
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<td>and function as related to the human digestive,</td>
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<td>nervous, respiratory, reproductive and endocrine</td>
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<td>systems. Emphasis placed on the inter-relationships</td>
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<td>of these systems. Laboratory fee required.</td>
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<td>224</td>
<td>Environmental Biology</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>3 Lab.</td>
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<td>Prequisite: 6 hrs. biology. A one semester course</td>
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<td>dealing with the basic principles and techniques</td>
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<td>of aquatic and terrestrial communities and how</td>
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<td>these relate to the problems facing man in a</td>
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<td>modern technological society. Laboratory fee</td>
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<td>226</td>
<td>Genetics</td>
<td>4 Cr.</td>
<td>3 Lec.</td>
<td>3 Lab.</td>
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<td>Fundamental concepts in genetics to include</td>
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<td>Mendelian inheritance, recombination genetics,</td>
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<td>the biochemical theory of genetic material and</td>
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<td>mutation theory. Plant and animal materials will</td>
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<td>be used to study population genetics, linkage,</td>
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<td>gene structure and function and other concepts</td>
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<td>of heredity. Laboratory fee required.</td>
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</tbody>
</table>
Blueprint Reading

177 Blueprint Reading 2 Cr., 1 Lec., 3 Lab.
The description and explanation of engineering drawings is the content of the course. This includes multiview projection, sections, auxiliaries, bill of materials, symbols, notes, conventions, and standards. The skills of visualization, dimensioning, and sketching of machine parts are covered in the course.

Bookkeeping

Business

105 Introduction to Business 3 Cr., 3 Lec.
Provides overall picture of business operation; includes analysis of specialized fields within business organization; identifies role of business in modern society. (This course is offered on campus and may be offered via television.)

131 Bookkeeping I 3 Cr., 3 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.

132 Bookkeeping II 3 Cr., 3 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.

136 Principles of Management 3 Cr., 3 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.

137 Principles of Retailing 3 Cr., 3 Lec.
The operation of the retail system or distribution. The inter-relationship of consumer demand, inventory control, the buying sequence, personnel requirements, use of computer in retailing, store location and layout and credit policies.

143 Personal Finance 3 Cr., 3 Lec.
A study of everyday financial problems encountered in managing personal affairs. Includes financial planning, insurance, budgeting, use of credit, home ownership, savings, investment and tax problems. (This course is offered on campus and may be offered via television.)

146 Transportation and Traffic Management 3 Cr., 3 Lec.
Problem analysis and project development for students majoring in transportation technology. Special emphasis is placed upon present day transportation modes, carrier services, carrier pricing systems, documentation, carrier liability claims, import/export procedures and federal and state regulation policies. This course is designed to develop skills leading toward certification examinations of the American Society of Traffic and Transportation.

150 Management Training 4 Cr., 20 Lab.
Prerequisite: Concurrent enrollment in approved mid-management program. Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in business management. Business 150 will be offered the first semester.

151 Management Training 4 Cr., 20 Lab.
Prerequisite: Concurrent enrollment in approved mid-management program. A continuation of Business 150. Business 151 will be offered the second semester.

153 Small Business Management 3 Cr., 3 Lec.
The student will be studying the fundamental approaches to planning, establishing and operating a small business. The day-to-day operation of the business and reporting procedures will be studied as well as exploring the concepts of general management.
154 Management Seminar: Role of Supervision 2 Cr., 2 Lec.
Prerequisites: 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 student's work experiences.

155 Management Seminar: Personnel Management 2 Cr., 2 Lec.
Prerequisites: Business 150, Business 154 and concurrent enrollment in Business 151. A study of the principles, policies and practices relating to the personnel functions of business as applied to the student's work experience.

157 Small Business Bookkeeping and Accounting Practices 3 Cr., 3 Lec.
The student will study basic bookkeeping and accounting techniques essential to small business financial management and be able to apply them to the analysis and preparation of basic financial statements such as profit and loss, cash flow and statements of financial worth all fundamental to small business operations.

159 Beginning Shorthand 4 Cr., 3 Lec., 2 Lab.
Prerequisite: Credit in or concurrent enrollment in Business 172 or one year of typing in high school. Introduction of fundamental principles of Gregg Shorthand, Diamond Jubilee Series. Includes development of ability to read, write and transcribe shorthand outlines. Development of knowledge of mechanics of English.

160 Office Machines 3 Cr., 3 Lec.
Office Machines is designed to provide the student with a skill in the operation of such machines as adding machines, printing calculators, electronic display calculators and electronic printing calculators. Emphasis is placed on developing the touch system for both speed and accuracy. A review of the fundamental mathematics needed for successful machine use in the typical office situation is included in the course.

162 Office Procedures 3 Cr., 3 Lec.
Prerequisite: Business 172 or one year of typing in high school. Duties, responsibilities and personal qualifications of the office worker are emphasized. Units of work include filing, reprographics, mail, telephone, financial transactions and job applications.

165 Introduction to Word Processing 3 Cr., 3 Lec.
Prerequisite: Business 172 or one year of high school typing. Provides an overall picture of word processing and its effect on traditional office operations. A study of word processing terminology and word processing centers which combine up-to-date equipment with streamlined paper handling procedures. Training in the transcription and distribution of business communications. Reinforcement of English skills and English mechanics.

166 Intermediate Shorthand 4 Cr., 3 Lec., 2 Lab.
Prerequisites: Credit in Business 159 or one year of shorthand in high school, credit in Business 172 or one year of typing in high school. Application of the principles of Gregg Shorthand to develop the following: increased speed dictation, accuracy in typing from shorthand notes and emphasis on the beginning techniques of transcription skills. Included will be oral reading of shorthand outlines, speed building dictation and mailable copy. Special attention will be given to English fundamentals such as grammar, punctuation, etc.

167 Legal Terminology & Transcription 3 Cr., 3 Lec.
Prerequisite: Completion of Intermediate Typewriting or typing speed of 50 words per minute; completion of Introduction to Word Processing. This course is designed to acquaint students with legal terminology, including correct spelling and use of legal terms and Latin words and phrases, and provides intensive practice in building speed and accuracy in the transcription of legal terms.
171 Introduction to Supervision

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

172 Beginning Typing

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.

174 Intermediate Typing

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

201 Principles of Accounting I

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. (This course is offered on campus and may be offered via television.)

202 Principles of Accounting II

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.

203 Intermediate Accounting I

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

204 Managerial Accounting

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

205 Business Finance

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

206 Principles of Marketing

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

209 Principles of Insurance

This survey course in insurance is oriented toward business applications and is designed to inform the student of the life, property and casualty insurance needs of business and industry with emphasis on a systematic approach to risk management. Included are the study of credit life insurance, property, auto, accounts receivable, business interruption, key-man life insurance, accident and health, business liability, workmen's compensation, bonding and title insurance coverages.
210 Small Business Organization, Acquisition and Finance 3 Cr., 3 Lec.
The student will study alternative strategies and procedures for organizing a business, the planning necessary for establishing a business, evaluation of a business for acquisition purposes, and how to prepare and present a loan proposal.

211 Small Business Operations 3 Cr., 3 Lec.
The student will be introduced to problems associated with day to day operations of small business. Case studies and problem solving will be emphasized to prepare the student to cope with full range of operational management problems such as compliance with regulations, personnel administration, accounts receivable management, and business insurance.

230 Salesmanship 3 Cr., 3 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.

231 Business Correspondence 3 Cr., 3 Lec.
Prerequisites: Credit in Business 172 or one year of typing in high school; credit in 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.

233 Advertising and Sales Promotion 3 Cr., 3 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 consumers 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.

234 Business Law 3 Cr., 3 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.

237 Organizational Behavior 3 Cr., 3 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.

238 Cost Accounting 3 Cr., 3 Lec.
Prerequisite: Business 202. The theory and practice of accounting for a manufacturing concern. Detailed study of the measurement and control of material, labor and factory overhead for the job order and process cost system. Budgets, variance analysis, standard costs, joint and by-products costing will be discussed.

239 Income Tax Accounting 3 Cr., 3 Lec.
Prerequisite: Business 202 or consent of instructor. Provides an understanding of basic income tax laws applicable to individuals and sole proprietorships. Subjects treated include personal exemptions, gross income, business expenses, non-business deductions, capital gains and losses. Emphasis is on those problems commonly encountered in the preparation of income tax returns.

242 Personnel Administration 3 Cr., 3 Lec.
Personnel Administration is a business course designed to provide a solid foundation in the fundamentals, theories, principles and practices of people management. Emphasis will be on people and the factors that are relevant to employment of people; i.e., recruitment, selection, training, job development, interactions with others, labor management relations, government regulations, etc. The managerial functions of planning, organizing, staffing, directing and controlling will provide the framework for applying the principles which are significant in personnel interactions and management.
250 Management Training 4 Cr., 20 Lab.
Prerequisites: Business 150-151; concurrent enrollment in Business 254.
Continuation of supervised employment in the student's chosen field.
Intended to provide increased supervisory responsibility for students preparing for careers in business management. Business 250 will be offered the first semester.

251 Management Training 4 Cr., 20 Lab.
Prerequisites: Business 150-151; concurrent enrollment in Business 255.
A continuation of Business 250: Business 251 will be offered the second semester.

254 Management Seminar: Organizational Development 2 Cr., 2 Lec.
Prerequisites: 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.

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

256 Office Management 3 Cr., 3 Lec.
A study of the organization, design, and control of office activities. Included is a study of standards of office practice; office services; wage payment plans; selection and training and supervising of office employees; office planning, organizing, and controlling techniques; and duties and responsibilities of the office manager.

265 Word Processing Practices and Procedures 3 Cr., 3 Lec.
Prerequisite: Successful completion of Business 165. Theory and practice of translating ideas into words, putting these words on paper and turning that paper into communication. Emphasis on training in composing and dictating business communications, developing teamwork skills, setting priorities, scheduling, understanding procedures, researching, storing and retrieving documents and managing word processing systems. Further development of transcribing and magnetic keyboarding skills. Reinforcement of typing skills and English mechanics. Goal is development of employable skills in an office or word processing center.

266 Advanced Shorthand 4 Cr., 3 Lec., 2 Lab.
Prerequisites: Credit in Business 166 or two years of shorthand in high school, credit in Business 174 or two years of typing in high school. Emphasis is on specialized speed building dictation, timed typewritten mailable transcription, additional vocabulary building and extensive production work capabilities. Continued development of this high level skill enables the student to meet the challenges presented in any office situation.

273 Advanced Typing 2 Cr., 1 Lec., 2 Lab.
Prerequisite: Credit in Business 174 or two years of typing in high school. Decision making and timed production of all types of business material are emphasized. A continuation of skill development and a review of typing techniques are also stressed. This course will demand accuracy at advanced speeds.

274 Legal Secretarial Procedures 3 Cr., 3 Lec.
Prerequisite: Completion of Intermediate Typewriting or typing speed of 50 words per minute; completion of Intermediate Shorthand or shorthand dictation speed of 80 words per minute. This course is designed for (1) the student who is training for a career as a legal secretary; (2) the secretary who wishes to train for a career as a legal secretary; (3) the legal secretary who desires a more comprehensive background in legal secretarial procedures. Specialized training is provided in knowledges and skills required of legal secretaries in the
areas of reminder and filing systems, telephone usage, dictation and correspondence, preparation of legal documents, the court system, client contacts, use of the law library, research techniques, timekeeping, billing, law office bookkeeping, legal secretarial ethics, and how to obtain a legal secretarial position.

275 Secretarial Procedures 3 Cr., 3 Lec.
Prerequisites: Completion of or concurrent enrollment in Business 174 and completion of or concurrent enrollment in either Business 166 or Business 265. This course is designed primarily to make the student think in terms of initiative, creative thinking, and follow-through within these units of work: In-basket exercises, decision-making problems, utilization of the shorthand/transcription skills, units on public and personal relations, supervisory principles, business ethics and organizing time and work.

713 (See Cooperative Work Experience) 3 Cr.
714 (See Cooperative Work Experience) 4 Cr.
803 (See Cooperative Work Experience) 3 Cr.
804 (See Cooperative Work Experience) 4 Cr.
813 (See Cooperative Work Experience) 3 Cr.
814 (See Cooperative Work Experience) 4 Cr.

400 Woodworking Tools and Materials 1 Cr., 30 Contact Hrs.
This course is designed to train the student in the proper use of the various types of woodworking tools and equipment. The machines used include the table saw, jointer, planer, radial arm saw, router, sander and various portable power tools. Proper safety procedures in the use of these woodworking machines are emphasized. Laboratory fee required.

410 Site Preparation and Foundations 4 Cr., 120 Contact Hrs.
This course will give the student the necessary knowledge and skills for laying out and constructing domestic building foundations, pier construction and placement, erecting concrete foundation forms, slab foundations and pouring concrete foundations. Laboratory fee required.

411 Use of Builder's Level and Rod 1 Cr., 30 Contact Hrs.
Proper procedure in setting up a builder’s level, reading the rod. Laboratory fee required.

412 Batter Boards 1 Cr., 30 Contact Hrs.
Proper erection of batter boards, building lines and squaring a building; reading and interpreting plot plans. Laboratory fee required.

413 Foundation Forming 2 Cr., 60 Contact Hrs.
Panelized forms, build in place forms, edge forms, footings, bracing, piers and form hardware. Terminology of form construction. Laboratory fee required.

420 Interior Trim 5 Cr., 150 Contact Hrs.
This course provides training in the cutting, application, and finish of interior paneling, trim, fitting and hanging doors and in the installation of hardware and cabinets. The course also includes the preparation of surfaces for finish and the application of various types of wood finish. Laboratory fee required.

421 Paneling 2 Cr., 60 Contact Hrs.
Identify paneling, joint treatment wall preparation and finish. Laboratory fee required.

422 Dry Wall 1 Cr., 30 Contact Hrs.
Selection, installation and treatment of gypsum wall board. Laboratory fee required.

423 Door Hanging 1 Cr., 30 Contact Hrs.
Identification, casing and trim installation, hanging of different types of doors. Laboratory fee required.
424 **Window Installation** 1 Cr., 30 Contact Hrs.
Trim and casing of various types of windows, wood, steel and aluminum. Laboratory fee required.

430 **Construction Cost Estimating** 1 Cr., 30 Contact Hrs.
Prerequisite: Blueprint Reading 177. This course is designed to train the student to prepare cost estimates of residential and small commercial structures. Estimates will be made from blueprints and specifications in order to familiarize the student with the process of bid preparation. Laboratory fee required.

440 **Rough Framing** 4 Cr., 120 Contact Hrs.
In this course, the student will learn how to erect various types of frame structures, including balloon and western framing. The course will include construction of floor systems, ceilings and walls. Proper safety procedures are emphasized. Laboratory fee required.

441 **Floor and Sill Framing** 2 Cr., 60 Contact Hrs.
Terminology, sill construction and installation. Install floor joist, floor openings, bridging and sub-flooring. Laboratory fee required.

442 **Wall and Partition Framing** 2 Cr., 60 Contact Hrs.
Terminology, construct balloon and western frame layout, story poles, window and door frames, corners, connections. Laboratory fee required.

450 **Roof Framing** 5 Cr., 150 Contact Hrs.
In this course, the student will gain the knowledge and develop the skills needed to lay rafters of all types, cut and erect rafters, apply sheathing and roof coverings. The course will cover the various roof styles and framing units, the determination of rafter length and material estimating. The proper and safe use of power tools used in roof framing is emphasized. Laboratory fee required.

451 **Styles, Terminology and Methods** 1 Cr., 30 Contact Hrs.
Identification of parts of the various roofs, roof styles and methods of roof layouts. Laboratory fee required.

452 **Gable Roofs** 1 Cr., 30 Contact Hrs.
Layout, erection and bracing gable roofs, gable ends. Laboratory fee required.

453 **Hip Roofs** 1 Cr., 30 Contact Hrs.
Layout and erection of gable roofs, hip rafters, hip jacks and valley rafters. Laboratory fee required.

454 **Mansard and Gambrel Roofs** 1 Cr., 30 Contact Hrs.
Layout and erection of mansard and gambrel roofs. Laboratory fee required.

455 **Shed Roofs** 1 Cr., 30 Contact Hrs.
Layout and erection of shed roofs. Laboratory fee required.

460 **Stair Building** 3 Cr., 90 Contact Hrs.
In this course, the student will gain the knowledge and develop the skills needed in building stairs of all types. The course will include riser and tread calculations, material estimating, the layout and construction of a staircase. The course will also cover the construction of stair forms for concrete stairs. Laboratory fee required.

461 **Stair Terminology and Calculations** 1 Cr., 30 Contact Hrs.
Stair terminology, stair layout and calculation. Laboratory fee required.

462 **Stair Construction** 2 Cr., 60 Contact Hrs.
Construction of various types of stairs, straight flight, landings, L-shaped and winders. Housed, semi-housed and open stairs. Laboratory fee required.

470 **Exterior Trim and Finish** 2 Cr., 60 Contact Hrs.
In this course, the student will develop the skills related to exterior wall coverings and trim. The student will apply sheathing to outside walls and apply finish, siding and trim. Laboratory fee required.

471 **Exterior Sheathing** 1 Cr., 30 Contact Hrs.
Identification and application of diagonal, fiberboard panel sheathing and siding application. Laboratory fee required.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Contact Hrs.</th>
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<tbody>
<tr>
<td>472</td>
<td>Exterior Trim</td>
<td>1 Cr.</td>
<td>30</td>
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<tr>
<td></td>
<td>Gable trim, cornices, facia, lookouts, frieze. Identification and application of mouldings. Laboratory fee required.</td>
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<tr>
<td>480</td>
<td>Custom Cabinet Making</td>
<td>7 Cr.</td>
<td>210</td>
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<tr>
<td></td>
<td>This course covers the planning and construction of various types of custom cabinets and fixtures usually fabricated in residential construction. The student is required to construct, finish and install various types of cabinets. Laboratory fee required.</td>
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<tr>
<td>481</td>
<td>Design and Construction of Modern Cabinets</td>
<td>1 Cr.</td>
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<tr>
<td></td>
<td>Identification of types of cabinets, cabinet parts, hardware and jointery used in cabinet construction. Laboratory fee required.</td>
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<tr>
<td>482</td>
<td>Cabinet Installation</td>
<td>2 Cr.</td>
<td>60</td>
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<tr>
<td></td>
<td>Installation and construction of modern cabinetry; proper installation of cabinets, scribing, leveling, door hanging and hardware. Laboratory fee required.</td>
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<tr>
<td>483</td>
<td>Cabinet Construction</td>
<td>4 Cr.</td>
<td>120</td>
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<tr>
<td></td>
<td>Custom building of cabinets, framing, door and drawer construction. Laboratory fee required.</td>
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<tr>
<td>490</td>
<td>Commercial Building</td>
<td>11 Cr.</td>
<td>330</td>
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<td></td>
<td>In this course, the student will develop the skills related to light commercial construction. Laboratory fee required.</td>
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<tr>
<td>491</td>
<td>Terminology</td>
<td>1 Cr.</td>
<td>30</td>
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<tr>
<td></td>
<td>Construction procedures and types of light commercial construction. Laboratory fee required.</td>
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<tr>
<td>492</td>
<td>Vertical Piers and Columns</td>
<td>2 Cr.</td>
<td>60</td>
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<tr>
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<td>Terminology, form construction column corners, finishes and shapes. Laboratory fee required.</td>
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<tr>
<td>493</td>
<td>Horizontal Beam Forms</td>
<td>3 Cr.</td>
<td>90</td>
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<tr>
<td></td>
<td>Terminology, construction practices, domes, pretensioned slab forms. Laboratory fee required.</td>
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<tr>
<td>494</td>
<td>Fireproof Encasement Forms</td>
<td>3 Cr.</td>
<td>90</td>
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<tr>
<td></td>
<td>Terminology, hardware construction of fireproof encasement forms. Laboratory fee required.</td>
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<tr>
<td>495</td>
<td>Stair Forms</td>
<td>2 Cr.</td>
<td>60</td>
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<tr>
<td></td>
<td>Commercial stair types and construction of various types of stair forms. Laboratory fee required.</td>
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<tr>
<td>500</td>
<td>Building Construction Drafting</td>
<td>2 Cr.</td>
<td>60</td>
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<td></td>
<td>This course is designed to train the student in basic drafting practices and procedures related to the building construction industry. The course will include the use of instruments, sketching, dimensioning, and measurements from various views and drawing symbols. Laboratory fee required.</td>
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<td>703</td>
<td>(See Cooperative Work Experience)</td>
<td>3 Cr.</td>
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<tr>
<td>704</td>
<td>(See Cooperative Work Experience)</td>
<td>4 Cr.</td>
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<td>814</td>
<td>(See Cooperative Work Experience)</td>
<td>4 Cr.</td>
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</tr>
<tr>
<td>101</td>
<td>General Chemistry</td>
<td>4 Cr.</td>
<td>3 Lec. 3 Lab.</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Developmental Mathematics 093 or equivalent. Designed for science and science-related majors. The course includes the fundamental laws and theories dealing with the structure and interactions of matter 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</td>
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principles are applied to the solution of quantitative problems relating to chemistry. Laboratory fee required.

102 General Chemistry 4 Cr., 3 Lec., 3 Lab.
Prerequisite: Chemistry 101. Designed for science and science-related majors, this course is a continuation of Chemistry 101. The fundamental concepts introduced previously, together with additional ones, are applied to a variety of topics, including solutions and colloids, chemical kinetics and equilibrium, electrochemistry and nuclear chemistry. Qualitative inorganic analysis is included in the laboratory work. Laboratory fee required.

115 General Chemistry 4 Cr., 3 Lec., 3 Lab.
Prerequisite: Developmental Mathematics 091 or equivalent. Designed for non-science majors, the course traces the development of theoretical concepts and the evolution of these concepts in explaining various observations and laws relating to chemical bonding reactions, states of matter, solutions, electrochemistry and nuclear chemistry. The descriptive chemistry of some common elements and inorganic compounds is included. Laboratory fee required.

116 General Chemistry 4 Cr., 3 Lec., 3 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. Laboratory fee required.

201 Organic Chemistry I 4 Cr., 3 Lec., 4 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. Laboratory fee required.

202 Organic Chemistry II 4 Cr., 3 Lec., 4 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 compounds. Laboratory fee required.

203 Quantitative Analysis 4 Cr., 2 Lec., 6 Lab.
Prerequisites: Chemistry 102, Mathematics 101 or Mathematics 104 or equivalent. This course includes the principles of chemistry as applied by the analytical chemist to quantitative determinations. Topics include gravimetry, oxidation-reduction, indicators and acid-base theory. Laboratory experience focuses on the fundamentals of gravimetric and volumetric analysis with an introduction to colorimetry. Laboratory fee required.

100 College Learning Skills 1 Cr., 1 Lec.
The course will provide individualized study and practice in reading, study skills and/or composition. It is designed for students who wish to extend their learning skills for academic or career programs. May be repeated for a maximum of three (3) credits.

131 Applied Composition and Speech 3 Cr., 3 Lec.
The study of communications skills as a practical means of preparing for successful performance in the student's chosen vocation. Practice in writing letters, applications, resumes and short reports.

132 Applied Composition and Speech 3 Cr., 3 Lec.
Prerequisite: Communications 131 or consent of instructor. The study of communication processes with emphasis on written persuasion directly related to occupational training and work experience. Use of
expository techniques in business letters and documented reports.
Practice in oral communications.

175 Introduction to Computing Science 3 Cr., 3 Lec.
Provides a basic understanding of the computer, cultural impact,
history of computers, vocabulary, flow charts, data representation and
an introduction to procedure-oriented languages with general
applications.

701, 711, 801, 811 1 Cr.
702, 712, 802, 812 2 Cr.
703, 713, 803, 813 3 Cr.
704, 714, 804, 814 4 Cr.
Prerequisite: Completion of two courses in the student's major and
instructor/coordinator approval. This course constitutes an on-the-job
application of the theory and laboratory instruction received in the
formal courses of the student's major curriculum. The student will be
placed in a work-study position in his technical/occupational field that
will test his skill and ability to function successfully in that respective
occupation. The student's learning in this work internship course will
be guided by a set of learning objectives formulated at the beginning
of each semester by the student, his instructor/coordinator and his
supervisor at work. The instructor will determine if the learning
objectives are valid and will give final approval for credit. The student
will have a regularly scheduled meeting with his instructor and will
complete appropriate assignments given to him by his instructor.

151 Beginning Ballet II 3 Cr., 1 Lec., 7 Lab.
Prerequisite: Dance 150. Continuation of Beginning Ballet I with
emphasis on expansion of combinations at the barre. Addition of
"connecting" steps learned at centre. Introduction of jumps and
pirouettes. Laboratory fee required.

155 Jazz I 1 Cr., 3 Lab.
A course designed to introduce students to basic skills of jazz dance
with emphasis on general body technique and development, rhythm
awareness, jazz styles and rhythmic combinations of movement.
Laboratory fee required.

156 Jazz II 1 Cr., 3 Lab.
Prerequisite: Jazz I or consent of instructor. A course designed for the
continuance of work on skills and style inherent in jazz dance. Class
work will deal with technical skills, combinations of steps and skills into
dance patterns, and exploration of composition in jazz form.
Laboratory fee required.

095 Communication Skills 3 Cr., 3 Lec.
A course designed for the student who needs grammar, paragraph
structure, reading skills, and/or oral communication to enhance his
proficiency in language communications. Students will be tested and
given prescribed work in one or a combination of the elements of
study as the individual needs indicate.

120 Communication Skills 3 Cr., 2 Lec., 2 Lab.
Designed for students with significant problems in communications
development causing learning problems. Group sessions are
supplemented with individual evaluations to provide a basis for the
development of personalized programs based on needs. Inter-
departmental planning provides alternative modes of learning. Special
attention is given to oral language as the initial language form. The
course is organized in terms of skills development in a competency-
based mode and enrollment may be accepted on a flexible basis on
instructor referral.

094 Learning Skills Improvement 1 Cr., 2 Lab.
A course designed for the student who needs improvement in
developmental skills to enhance his performance in academic or
career programs. Student will be assigned specific objectives as the
individual needs indicate. May be repeated for a maximum of three (3)
credits.
Developmental Mathematics


090 Pre-Algebra Mathematics 3 Cr., 3 Lec.
This course is designed to develop an understanding of fundamental operations using whole numbers, fractions, decimals and percentages and to strengthen basic skills in mathematics. The course is planned primarily for students who need to review basic mathematical processes. It is the first step in the mathematics sequence and includes an introduction to algebra.

091 Elementary Algebra 3 Cr., 3 Lec.
Prerequisite: Developmental Mathematics 090 or equivalent. This course is designed to develop an understanding of first year algebra. It includes special products and factoring, fractions, equations, graphs, functions and an introduction to geometry.

093 Intermediate Algebra 3 Cr., 3 Lec.
Prerequisite: One year of high school algebra or Developmental Mathematics 091. Includes the terminology of sets, properties of real numbers, fundamental operations on polynomials and fractions, products, factoring, radicals and rational exponents. Also covered are solutions of linear, fractional, quadratic and systems of linear equations, coordinate systems and graphing.

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

090 Techniques of Reading/Learning 3 Cr., 3 Lec.
Developmental Reading 090 is designed to meet individual needs for proficiency in reading comprehension, vocabulary development, study skills and reading for success in academic areas and career advancement. It emphasizes learning how to learn and includes reading/learning experiences developed to strengthen the total educational background of each student. Developmental Reading 090 and Developmental Reading 091 are offered in a laboratory setting employing varied instructional methods.

091 Techniques of Reading/Learning 3 Cr., 3 Lec.
Developmental Reading 091 is designed to meet individual needs for proficiency in reading comprehension, vocabulary development, study skills and reading for success in academic areas and career advancement. It emphasizes learning how to learn and includes reading/learning experiences developed to strengthen the total educational background of each student. Developmental Reading 090 and Developmental Reading 091 are offered in a laboratory setting employing varied instructional methods.

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

090 Writing 3 Cr., 3 Lec.
Developmental Writing 090 emphasizes the diagnosis and correction of deficiencies in basic writing skills. Spelling, grammar, vocabulary improvement and principles of sentence and paragraph structure (as well as experience in organization for composition) are taught in a laboratory utilizing individualized instruction techniques.

091 Writing 3 Cr., 3 Lec.
Developmental Writing 091 is a sequel to Writing 090 and concentrates on the composition process; therefore, it is important to develop the student's skills of organization, transition and revision. His program of composition will vary according to his individual needs, which may include brief, simple forms as well as more complex critical and research writing.
092 Writing Lab 1 Cr., 3 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, including the research paper and in editing for mechanical effectiveness.

400 Diesel Engine Fundamentals and Component Repair 9 Cr., 270 Contact Hrs.
A study of the theory, principles, operating procedures and component repair of the modern high speed diesel engine. Emphasis will be placed on the proper use of special tools and precision measuring instruments. Laboratory fee required.

401 Rebuilding Cylinder Heads 2 Cr., 60 Contact Hrs.
A study of diesel engine cylinder heads including disassembly, inspection, servicing and reassembly. Laboratory fee required.

402 Rebuilding Caterpillar Short Block 2 Cr., 60 Contact Hrs.
Disassembly, inspection, servicing and reassembly of a caterpillar diesel engine short block. Laboratory fee required.

403 Rebuilding Cummins Short Block 2 Cr., 60 Contact Hrs.
Disassembly, inspection, servicing and reassembly of a Cummins diesel engine short block. Laboratory fee required.

404 Rebuilding Detroit Diesel Short Block 2 Cr., 60 Contact Hrs.
Disassembly, inspection, servicing and reassembly of a Detroit diesel short block. Laboratory fee required.

405 Air Induction, Cooling and Lubrication Systems 1 Cr., 30 Contact Hrs.
Theory of operation, troubleshooting, and servicing diesel engine air induction, cooling and lubrication systems. Laboratory fee required.

410 Diesel Engine Fuel Systems 2 Cr., 60 Contact Hrs.
A study of modern diesel engine fuel systems. Instruction is given in removal, inspection, installation and adjustment of fuel system components, such as injectors, pumps, filters, lines and governors. Laboratory fee required.

420 Diesel Engine Tune-up and Operation 3 Cr., 90 Contact Hrs.
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 engine dynamometer. Laboratory fee required.

421 Caterpillar Engine Tune-up and Operation 1 Cr., 30 Contact Hrs.
Diagnosing, testing and correcting problems encountered in Caterpillar engine tune-up and operation. Laboratory fee required.

422 Cummins Engine Tune-up and Operation 1 Cr., 30 Contact Hrs.
Diagnosing, testing and correcting problems encountered in Cummins engine tune-up and operation. Laboratory fee required.

423 Detroit Diesel Engine Tune-up and Operation 1 Cr., 30 Contact Hrs.
Diagnosing, testing and correcting problems encountered in Detroit diesel engine tune-up and operation. Laboratory fee required.

430 Engine Overhaul 6 Cr., 180 Contact Hrs.
The complete overhaul of the diesel engine will be accomplished. The service manual will be used to provide the students with skills in locating data and in using service manuals. Laboratory fee required.

431 Caterpillar Engine Rebuilding 2 Cr., 60 Contact Hrs.
Complete overhaul of the Caterpillar diesel engine including removing major components, inspection, servicing and reassembly. Laboratory fee required.

432 Cummins Engine Rebuilding 2 Cr., 60 Contact Hrs.
Complete overhaul of the Cummins diesel engine including removing major components, inspection, servicing and reassembly. Laboratory fee required.
433 Detroit Diesel Engine Rebuilding 2 Cr., 60 Contact Hrs.
Complete overhaul of the Detroit diesel engine including removing major components, inspection, servicing and reassembly. Laboratory fee required.

440 Diesel Shop Practices 3 Cr., 90 Contact Hrs.
Designed to acquaint the student with oxyacetylene and arc welding and cutting. The use of power tools and machines that are used in the trade are introduced. Precision measuring tools and their uses will be included. Laboratory fee required.

441 Oxygen/Acetylene Welding 1 Cr., 30 Contact Hrs.
The basic fundamentals of oxygen/acetylene welding. Laboratory fee required.

442 Arc Welding 1 Cr., 30 Contact Hrs.
The basic fundamentals of arc welding. Laboratory fee required.

443 Use and Operation of Power Tools 1 Cr., 30 Contact Hrs.
The proper and safe use of power tools related to diesel mechanics. Includes the use of taps, dies and reamers. Laboratory fee required.

450 Vehicle Electrical Systems 2 Cr., 60 Contact Hrs.
A study of the vehicle electrical system with emphasis on the maintenance and repair of starting motors, alternators, regulators, switches, and wiring circuits. The student will receive instructions in the use of testing equipment. Laboratory fee required.

451 Electricity: The Theory and Basic Circuitry 1 Cr., 30 Contact Hrs.
An introduction to the fundamentals of electricity and magnetism related to diesel equipment. Laboratory fee required.

452 Starting, Charging, Lighting and Accessory Circuits 1 Cr., 30 Contact Hrs.
Maintenance and repair of starting motors, alternators, regulators, switches and wiring circuits related to diesel equipment. Laboratory fee required.

460 Drive Train and Brakes 14 Cr., 420 Contact Hrs.
A study of the power train in diesel powered equipment, including inspection and repair of clutches, torque converters, transmissions, axles and drive lines. Air brake systems, component parts, troubleshooting and servicing are covered. Laboratory fee required.

461 Five Speed Standard Transmission 1 Cr., 30 Contact Hrs.
Inspection and repair of five speed standard transmissions used on diesel equipment. Laboratory fee required.

462 Fuller RT-910 Standard Transmission 2 Cr., 60 Contact Hrs.
Inspection and repair of the Fuller RT-910 standard transmission. Laboratory fee required.

463 Differentials 1 Cr., 30 Contact Hrs.
Inspection and repair of differentials used on diesel equipment. Laboratory fee required.

464 Allison Automatic Transmission 2 Cr., 60 Contact Hrs.
Inspection and repair of the Allison automatic transmission. Laboratory fee required.

465 Responder Automatic Transmission 2 Cr., 60 Contact Hrs.
Inspection and repair of the Responder automatic transmission. Laboratory fee required.

466 Caterpillar Power Shift Transmission 2 Cr., 60 Contact Hrs.
Inspection and repair of the Caterpillar power shift transmission. Laboratory fee required.

467 Air Brake Systems 2 Cr., 60 Contact Hrs.
Inspection and repair of air brake systems used on diesel equipment. Laboratory fee required.

468 Clutches 1 Cr., 30 Contact Hrs.
Inspection and repair of clutches used on diesel equipment. Laboratory fee required.
469 Torque Converters 1 Cr., 30 Contact Hrs.
Inspection and repair of torque converters used on diesel equipment. Laboratory fee required.

703 (See Cooperative Work Experience) 3 Cr.
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713 (See Cooperative Work Experience) 3 Cr.
714 (See Cooperative Work Experience) 4 Cr.
803 (See Cooperative Work Experience) 3 Cr.
804 (See Cooperative Work Experience) 4 Cr.
813 (See Cooperative Work Experience) 3 Cr.
814 (See Cooperative Work Experience) 4 Cr.

901, 902, 903 Directed Studies
Prerequisite: Completion of twelve semester hours in residence and the approval of a division chairman and the appropriate dean. Recommended for honor students in a major area offered by a division or for students requesting study in-depth in a particular area. The courses may include special projects, honors seminars, field study or independent study. Upon approval, may be repeated for credit.

901 1 Cr.
902 2 Cr.
903 3 Cr.

130 Introduction to Distribution 3 Cr., 3 Lec.
This course studies the place of wholesale distribution among producers, institutional and industrial customers, and ultimate consumers. The course examines the role of the wholesale distributor in the channels of distribution and serves as a general survey of the wholesaling functions for the student contemplating a career in the wholesale distribution industry. This course is also appropriate for existing and new employees already in entry-level positions with a demonstrated capacity for advancement.

131 Principles and Practices of Wholesale Marketing I 3 Cr., 3 Lec.
Part I of a two part program designed to introduce the student to wholesale marketing principles and procedures as practiced in the Dallas/Fort Worth regional distribution center. Part I covers the regional wholesale marketing environment both current and forecast, determination of product, product lines and brand policies; evaluation of relationships among cost, price and profit levels, and primary considerations concerning storage and channels of distribution.

132 Principles and Practices of Wholesale Marketing II 3 Cr., 3 Lec.
A continuation of the study of principles and practices of wholesale marketing. Addresses the development and organization of the total sales effort, customer service requirements, credit and collection policies and overall analysis of the marketing system. Course is problem solving oriented and culminates in development of a marketing plan encompassing all aspects of the wholesale marketing function.

133 Transportation Management 3 Cr., 3 Lec.
Students will study the role of the transportation function within the physical distribution system. Special emphasis will be placed upon modern planning and control techniques associated with the design and operation of efficient and cost effective transportation systems. Carrier services, pricing structures, documentation, liability, claims and regulation of transportation will also be included.

230 Materials Handling and Physical Distribution 3 Cr., 3 Lec.
This course covers the operation and management of the materials handling and physical distribution functions pertinent to the warehousing environment — the largest cost center in a wholesale distribution business. This course integrates the planning, organizing,
staffing, equipping, operating and maintaining functions involved in the management of warehousing facilities. Included in the course will be field trips to inspect on-going physical distribution facilities to complement each phase of study.

231 Purchasing, Pricing and Inventory Management 3 Cr., 3 Lec.
This course introduces the student to the essential planning and operational considerations upon which wholesale distribution strategies are based. Purchasing strategies and typical “buy plans” integrating sales forecasts, lead time and storage and distribution capabilities will be investigated. The student will also evaluate alternative price and discounting tactics, inventory management systems (cardex, computer, etc.), and establishment and maintenance of specified inventory levels and cost controls.

Earth Science

117 Earth Science 4 Cr., 3 Lec., 3 Lab.
The course encompasses the interaction of the earth sciences and man’s physical world. Geology, astronomy, meteorology and space science are emphasized through the application of selected principles and concepts of the applied sciences. The course is directed toward the non-science major. Laboratory fee required. (This course is offered on campus and may be offered via television.)

Ecology

291 Man and His Environment II 3 Cr., 3 Lec.
A course designed to increase environmental awareness and knowledge. Areas of study include pollution, erosion, land use, energy resource depletion, overpopulation and the effects of unguided technological development. Through documentaries and interviews with experts, an emphasis is placed on proper planning of societal and individual action in order to protect the natural environment. (This course may be offered via television.)

Economics

201 Principles of Economics I 3 Cr., 3 Lec.
The fundamental principles of macroeconomics. Economic organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations and growth. Sophomore standing recommended. (This course is offered on campus and may be offered via television.)

202 Principles of Economics II 3 Cr., 3 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.

Electricity

400 DC and AC Circuits 4 Cr., 120 Contact Hrs.
In this course the student will gain the knowledge and develop the skills needed to work with direct and alternating current circuits. The course will cover ohms law, series, parallel and combination circuits and instruments. It will also include reactance, impedance, phase angle, voltage, current and power measurements in single-phase and three-phase circuits. Laboratory fee required.

401 DC Circuits and Measurements 1 Cr., 30 Contact Hrs.
Calculate and measure voltage, current and resistance in series, parallel and combination circuits. Proper operation and use of test instruments. Laboratory fee required.

402 Basic AC Circuits 2 Cr., 60 Contact Hrs.
Reactance, impedance, phase angle, voltage, current and power calculations and measurements. Laboratory fee required.

403 Three-Phase Circuits 1 Cr., 30 Contact Hrs.
Calculations and measurements related to three-phase wye and delta circuits. Laboratory fee required.

410 Residential Wiring Practices 9 Cr., 270 Contact Hrs.
In this course, the student will gain the knowledge and develop the skills needed in residential wiring including wire selection, splicing of wires, switches and receptacles. Wiring practices related to special appliance circuits, electric heating, central air conditioning, grounding
practices and service entrance are also included. Laboratory fee required.

411 Residential Codes 1 Cr., 30 Contact Hrs.
A study of the national electric code and local ordinances related to residential wiring. Laboratory fee required.

412 General Wiring Practices 4 Cr., 120 Contact Hrs.
Wiring practices used in residential wiring such as wire selection, splicing of wires, switches, receptacles and lighting circuits. Laboratory fee required.

413 Appliance Circuits 3 Cr., 90 Contact Hrs.
Wiring practices used in appliance circuits, electrical heating, central air conditioning, grounding practices and service entrances. Laboratory fee required.

414 Low Voltage Circuits 1 Cr., 30 Contact Hrs.
Low voltage residential circuits including bells, chimes and alarms. Laboratory fee required.

420 Commercial Wiring Practices 8 Cr., 240 Contact Hrs.
In this course, the student will gain the knowledge and develop the skills needed in commercial wiring. The course will include electric code, conduit work, wire pulling, power circuits and problems encountered in electrical construction work. Laboratory fee required.

421 Commercial Codes 1 Cr., 30 Contact Hrs.
A study of the national electric code and local ordinances related to commercial wiring. Laboratory fee required.

422 Commercial Wiring 4 Cr., 120 Contact Hrs.
Commercial wiring practices including materials, conduit work, wire pulling and circuit layouts. Laboratory fee required.

423 Power Circuits 3 Cr., 90 Contact Hrs.
Commercial wiring practices related to service entrance, breaker panels, commercial appliances and problems encountered in electrical construction work. Laboratory fee required.

430 Electrical Machines 3 Cr., 90 Contact Hrs.
In this course, the student will develop the skills needed to work with the various types of electrical machines used in home and industry. The course will cover DC motors and generators, single-phase and three-phase motors. Laboratory fee required.

431 Motor Codes 1 Cr., 30 Contact Hrs.
A study of the national electric code and local ordinances related to motors. Laboratory fee required.

432 DC and Single-Phase Machines 1 Cr., 30 Contact Hrs.
Characteristics, connection and testing of DC motors and generators and single-phase motors. Laboratory fee required.

433 Three-Phase Motors 1 Cr., 30 Contact Hrs.
Characteristics, connection and testing of three-phase motors. Laboratory fee required.

440 Motor Controls 4 Cr., 120 Contact Hrs.
In this course, the student will connect, test and troubleshoot the various types of control circuits used for single-phase and three-phase motors. The course will include manual, automatic and solid-state controls. Laboratory fee required.

441 Control Circuit Diagrams 1 Cr., 30 Contact Hrs.
Terminology, symbols and the development of control circuit diagrams. Laboratory fee required.

442 Magnetic Starting and Overload Protection 1 Cr., 30 Contact Hrs.
Individual and multiple start-stop stations with overload protection. Laboratory fee required.

443 Jogging, Reversing and Sequencing 1 Cr., 30 Contact Hrs.
Connecting and testing, jogging and reversing motor controls and sequencing circuits. Laboratory fee required.
444 Solid State Controls 1 Cr., 30 Contact Hrs.
Connecting and testing transistor relay and SCR motor controllers. Laboratory fee required.

450 Transformers 3 Cr., 90 Contact Hrs.
This course covers a study of transformers used in distribution systems and industry. Single-phase and three-phase transformer types, connections, ratings, polarity and testing are included. Laboratory fee required.

451 Transformer Types and Testing 1 Cr., 30 Contact Hrs.
Basic transformer fundamentals, types of transformers and testing procedures. Laboratory fee required.

452 Distribution Transformers 2 Cr., 60 Contact Hrs.
The selection, connection and testing of single-phase and three-phase distribution transformers. Laboratory fee required.

460 Job Layout and Estimating 4 Cr., 120 Contact Hrs.
In this course, the student will learn how to plan residential and commercial wiring jobs. The course includes the use of blueprints and specifications in job planning, bids, material estimating and pricing. The use of electrical trade service publications is emphasized. Laboratory fee required.

461 Residential Planning 2 Cr., 60 Contact Hrs.
Plan the placing of receptacles, switches, lights and appliances; service entrance, material estimating and pricing. Laboratory fee required.

462 Commercial Planning 2 Cr., 60 Contact Hrs.
Plan the wiring job for a church, school or other commercial building working from blueprints and specification books. Laboratory fee required.

470 Electrical Orientation 1 Cr., 30 Contact Hrs.
In this course, the student will be introduced to the electrical industry and the college program. The student will also be introduced to the tools and materials used in the trade.

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813 (See Cooperative Work Experience) 3 Cr.
814 (See Cooperative Work Experience) 4 Cr.

English

101 Composition and Expository Reading 3 Cr., 3 Lec.
A course designed to develop the student's skills in writing and in the critical analysis of prose. (This course is offered on campus and may be offered via television.)

102 Composition and Literature 3 Cr., 3 Lec.
Prerequisite: English 101. Writing and reading activities in poetry, drama, the short story and the novel. Designed to increase the student's understanding and enjoyment of good literature. (This course is offered on campus and may be offered via television.)

201 British Literature 3 Cr., 3 Lec.
Prerequisite: English 102. A study of significant works of British literature from the Old English Period through the Eighteenth Century.

202 British Literature 3 Cr., 3 Lec.
Prerequisite: English 102. Study of important works from the Romantic Period to the present.

203 World Literature 3 Cr., 3 Lec.
Prerequisite: English 102. Reading and analysis of significant Continental European works from the Greek Classical Period through the Renaissance.
204 World Literature 3 Cr., 3 Lec.
Prerequisite: English 102. Study of ten to twelve important post-Renaissance works of Continental Europe, England and America.

205 American Literature 3 Cr., 3 Lec.
Prerequisite: English 102. Study of the works of the important writers before Whitman in the context of their times.

206 American Literature 3 Cr., 3 Lec.
Prerequisite: English 102. Reading and analysis of representative works from Whitman to the present.

209 Creative Writing 3 Cr., 3 Lec.
Prerequisite: English 102. Writing of fiction: short story, poetry and short drama.

215 Studies in Literature 3 Cr., 3 Lec.
Prerequisite: English 102. The student will read, analyze and discuss selections in literature organized by genre, period or geographical region. Course titles and descriptions will be available each semester prior to registration.

216 Studies in Literature 3 Cr., 3 Lec.
Prerequisite: English 102. The student will read, analyze and discuss selections in literature organized by theme, interdisciplinary content or major author. Course titles and descriptions will be available each semester prior to registration.

101 Beginning French 4 Cr., 3 Lec., 2 Lab.
Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension and oral expression. Laboratory fee required.

102 Beginning French 4 Cr., 3 Lec., 2 Lab.
Prerequisite: French 101 or equivalent. Continuation of French 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.

201 Intermediate French 3 Cr., 3 Lec.
Prerequisite: French 102 or equivalent. Reading, composition, grammar review and intense oral practice.

202 Intermediate French 3 Cr., 3 Lec.
Prerequisite: French 201 or equivalent. Continuation of French 201 with reading selections drawn more directly from contemporary literary sources. Composition.

203 Introduction to French Literature 3 Cr., 3 Lec.
Prerequisite: French 202 or consent of the instructor. Readings in French literature, history, culture, art and civilization.

204 Introduction to French Literature 3 Cr., 3 Lec.
Prerequisite: French 202 or consent of the instructor. Readings in French literature, history, culture, art and civilization.

101 Physical Geography 3 Cr., 3 Lec.
A survey of the physical makeup of the earth: weather and climate, topography, plant and animal life, land and sea. Attention is directed toward the earth in space, use of maps and charts and place geography.

102 Economic Geography 3 Cr., 3 Lec.
A study of the relation of man to his environment and his utilization of natural resources, dealing with problems of production, manufacture and distribution of goods throughout the world. The aspects of primitive subsistence and degrees of commercialism are considered.

103 Cultural Geography 3 Cr., 3 Lec.
Development of regional variations of culture, including the distribution of races, religions, languages and aspects of material culture, with emphasis on origins and diffusion.

101 Physical Geology 4 Cr., 3 Lec., 3 Lab.
Study of earth materials and processes for science and non-science majors. Includes introduction to geochemistry, geophysics, examination of the earth's interior, magnetism, setting in space, minerals, rocks, structure and geologic processes. Laboratory fee required.
102 Historical Geology 4 Cr., 3 Lec., 3 Lab.
Prerequisite: Geology 101 or permission of the instructor. Study of earth materials and processes within a time perspective. For science and non-science majors. Utilizes fossils, geologic maps and field studies to interpret geologic history. Laboratory fee required.

202 Introduction to Rock and Mineral Identification 3 Cr., 1 Lec., 3 Lab.
Prerequisites: Geology 101 and Geology 102. This is an elementary course in crystallography and physical properties of minerals and rocks. The student will study hand specimen identification of common rocks and minerals. Laboratory fee required.

German

101 Beginning German 4 Cr., 3 Lec., 2 Lab.
Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension and oral expression. Laboratory fee required.

102 Beginning German 4 Cr., 3 Lec., 2 Lab.
Prerequisite: German 101 or equivalent. Continuation of German 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.

201 Intermediate German 3 Cr., 3 Lec.
Prerequisite: German 102 or equivalent or consent of the instructor. Reading, composition, grammar review and intense oral practice.

202 Intermediate German 3 Cr., 3 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 3 Cr., 3 Lec.
Prerequisite: Sophomore standing recommended. An introduction to the study of political science; origin and development of constitutional democracy (United States and Texas); federalism and inter-governmental relations; local government; parties, politics and political behavior. Satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

202 American Government 3 Cr., 3 Lec.
Prerequisites: Government 201 and sophomore standing recommended. A study of the United States and Texas legislative process, the executive and the bureau structure, the judicial process, civil rights and liberties, domestic policies. Other topics include foreign relations and national defense. Satisfies requirements for Texas State Teacher's Certification. (This course is offered on campus and may be offered via television.)

205 Studies in Government 3 Cr., 3 Lec.
Prerequisites: Sophomore standing and six hours of history or government. A treatment of selected topics in government.

History

101 History of the United States 3 Cr., 3 Lec.
A general presentation of United States history, commencing with the European background and first discoveries. The pattern of exploration, settlement and development of institutions is followed throughout the Colonial Period and the early national experience to 1877. (This course is offered on campus and may be offered via television.)

102 History of the United States 3 Cr., 3 Lec.
Prerequisite: History 101 recommended. A survey of the unfolding of United States history from the Reconstruction Era to the present day. The study includes social, economic and political aspects of American life and follows the development of the United States as a world power. (This course is offered on campus and may be offered via television.)

105 Western Civilization 3 Cr., 3 Lec.
A survey of the background for development of civilization in the West from ancient time through the Enlightenment; the Mediterranean World including Greece and Rome; the Middle Ages and the beginnings of modern history. Particular attention is paid to Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization.
<table>
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<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
<th>Lectures</th>
<th>Laboratory</th>
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<tbody>
<tr>
<td>106</td>
<td>Western Civilization</td>
<td>3</td>
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<tr>
<td></td>
<td>The unfolding of the pattern of modern western civilization from the Enlightenment to current times. A study of the Age of Revolution and the beginning of industrialism; the nineteenth century and the social, economic and political factors of recent world history.</td>
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<tr>
<td>204</td>
<td>American Minorities</td>
<td>3</td>
<td>3</td>
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<td></td>
<td>Prerequisites: Sociology 101 and/or six hours of U.S. History recommended. The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene. The student may register for either History 204 or Sociology 204.</td>
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<tr>
<td>205</td>
<td>Studies in U.S. History</td>
<td>3</td>
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<td></td>
<td>Prerequisites: Sociology 101 and/or six hours of U.S. History recommended. The principal minority groups in American society; their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene. The student may register for either History 204 or Sociology 204.</td>
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<tr>
<td>101</td>
<td>Basic Design</td>
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<td>2</td>
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<td></td>
<td>A study of the fundamental principles of art, design, and color as a basis for developing originality and art appreciation in the home and in clothing. Laboratory experiences enhance the development of creative abilities by the application of the fundamental principles. This course is for students interested in home economics.</td>
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<tr>
<td>102</td>
<td>Food Selection and Preparation</td>
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<td>A study of basic nutrition involving the function and value of various foods and the factors related to food selection and preparation such as cost, availability, and time and methods required for preparation. Laboratory experiences relate the application of the fundamental principles of food selection, preparation and service to the problem of providing attractive, nutritious meals for the individual and family. Laboratory fee required.</td>
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<tr>
<td>110</td>
<td>Clothing and Home Design</td>
<td>3</td>
<td>2</td>
<td>4</td>
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<td></td>
<td>Prerequisite: Home Economics 101 or Art 101. The study and advanced application of color and design to the costume and in the home. Designed for students interested in home economics.</td>
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<tr>
<td>103</td>
<td>Orientation</td>
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<td>This is a course to help the student be successful in college. The student will make an individual contract with the instructor. Student experiences will include appropriate subject 'packages' such as 'improving your vocabulary', 'how to take notes', 'study skills', and 'listening skills'. Also, an evaluation session with a counselor is included. A 'package' may be made up of programmed materials, filmstrips, tapes, slides, seminars, learning activities, or other appropriate materials.</td>
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<td>104</td>
<td>Educational and Career Planning</td>
<td>3</td>
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<td>A course in human development designed to identify problem areas of concern to the student who is entering college for the first time and to develop approaches to problem solving in relation to educational and career decisions through the process of group counseling. Activities are planned to promote mature interpersonal involvement within the group, the college, and the community through an understanding of the causes and effects of one's own behavior in relation to himself and others.</td>
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<tr>
<td>105</td>
<td>Basic Processes of Interpersonal Relationships</td>
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<td>3</td>
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<td>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 is planned, partly by each class, designed to meet certain specific human needs of the students in the class.</td>
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<tr>
<td>106</td>
<td>Personal and Social Growth</td>
<td>3</td>
<td>3</td>
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</tbody>
</table>
|            | A course which deals with human development from the standpoint of the interaction between a person and his society. Understanding of self, the influences of society contributing to the development of self.
and the success of the individual within a society are investigated. Adjustment to family, school and society is developed.

107 Developing Leadership Behavior 3 Cr., 3 Lec.
A course in human development designed to meet specific needs of students through participation in activities. The focus of this course will be on the development of group dynamics, leadership and human relations skills. Students will be required to participate in the management experience of planning, execution and evaluation of activities. The theoretical body of knowledge regarding leadership development and growth in group dynamics and management skills will be emphasized.

101 Introduction to the Humanities 3 Cr., 3 Lec.
Through an examination of interrelated examples of man's creative achievements, the humanities course attempts to enlarge awareness and increase understanding of the nature of man and the values of human life. (This course is offered on campus and may be offered via television. Laboratory fee required for television course.)

102 Advanced Humanities 3 Cr., 3 Lec.
Prerequisite: Humanities 101 and/or permission of instructor. Humanities 102 is an in-depth and critical clarification of human value choices through the context of the humanities. It is designed to explore universal concerns such as man's relationship to himself and to others, the search for meaning, and man as a loving, believing and hating being as revealed by artists, playwrights, filmmakers, musicians, dancers, philosophers and theologians. The intent is to provide a sense of the commonality of human experience across cultures and civilizations and an understanding of the premises on which value choices are made.

101 Introduction to Mass Communications 3 Cr., 3 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.

102 News Gathering and Writing 3 Cr., 2 Lec., 3 Lab.
Prerequisite: Typing ability. Beginning reporting, study of types of news, leads, body treatment of story, feature in lead, facts, background and practice in writing straight news story. Required for all journalism majors.

103 News Gathering and Writing 3 Cr., 2 Lec., 3 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.

104 Student Publications 1 Cr., 3 Lab.
Individual staff assignments on the student newspaper in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with Journalism 102 or 103. Credit limited to one unit per semester. May be repeated for a total of three units credit.

105 Student Publications 1 Cr., 3 Lab.
Individual staff assignments on the student newspaper in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with Journalism 102 or 103. Credit limited to one unit per semester.

201 Editorial and Feature Writing 3 Cr., 3 Lec.
Prerequisites: 6 hours of journalism or consent of instructor. Emphasis is on handling of difficult news stories, editorial matter, and feature material. Research and interviewing techniques are emphasized with careful attention to development of feature stories for use in newspapers and magazines.
<table>
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<tr>
<th>Course</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>202 Student Publications</strong></td>
<td>1 Cr., 3 Lab.</td>
<td>Prerequisite: Permission of instructor. Individual staff assignments on the student newspaper in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with Journalism 102 or 103. Credit limited to one unit per semester.</td>
</tr>
<tr>
<td><strong>203 Student Publications</strong></td>
<td>1 Cr., 3 Lab.</td>
<td>Individual staff assignments on the student newspaper in one of the following journalistic fields: writing, advertising, photography, cartooning, editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may not be taken for credit concurrently with Journalism 102 or 103. Credit limited to one unit per semester.</td>
</tr>
<tr>
<td><strong>204 News Editing and Copy Reading</strong></td>
<td>3 Cr., 3 Lec.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>101 College Algebra</strong></td>
<td>3 Cr., 3 Lec.</td>
<td>Prerequisite: Two years of high school algebra or Developmental Mathematics 093. A study of functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem and algebraic proof.</td>
</tr>
<tr>
<td><strong>102 Plane Trigonometry</strong></td>
<td>3 Cr., 3 Lec.</td>
<td>Prerequisite: Mathematics 101 or equivalent. A study of angular measure, functions of angles, identities, solution of triangles, equations, inverse trigonometric functions, logarithms and complex numbers.</td>
</tr>
<tr>
<td><strong>106 Elementary Functions and Coordinate Geometry III</strong></td>
<td>5 Cr., 5 Lec.</td>
<td>Prerequisites: Two years of high school algebra and one semester of trigonometry. A study of the algebra of functions to include the following: polynomial, rational, exponential, logarithmic and trigonometric functions, functions of two variables, complex numbers, vectors and analytic geometry to include conics, transformation of coordinates, polar coordinates, parametric equations and three-dimensional space.</td>
</tr>
<tr>
<td><strong>107 Fundamentals of Computing</strong></td>
<td>3 Cr., 3 Lec.</td>
<td>Prerequisite: Two years of high school algebra or Developmental Mathematics 093. An introductory course designed primarily for students desiring credit toward a minor or major in computer science. The content of this course includes a study of logarithms and an introduction to a procedure-oriented language with general applications.</td>
</tr>
<tr>
<td><strong>111 Mathematics for Business and Economics I</strong></td>
<td>3 Cr., 3 Lec.</td>
<td>Prerequisite: Two years of high school algebra or Developmental Mathematics 093. A study of equations, inequalities, matrices, linear programming and linear, quadratic, polynomial, rational, exponential and logarithmic functions. Applications to business and economic problems are emphasized.</td>
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<tr>
<td><strong>112 Mathematics for Business and Economics II</strong></td>
<td>3 Cr., 3 Lec.</td>
<td>Prerequisite: Mathematics 111. Study of sequences and limits, differential calculus, integral calculus, optimization and appropriate applications.</td>
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<tr>
<td><strong>115 College Mathematics I</strong></td>
<td>3 Cr., 3 Lec.</td>
<td>Prerequisites: One year of high school algebra and one year of high school geometry or two years of high school algebra or Developmental Mathematics 093. A study of functions and relations, absolute values, variation, quadratic equations, complex numbers, functions of two variables, systems of equations and inequalities, elementary aspects of the theory of equations, progressions, the binomial theorem and algebraic proof.</td>
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Mathematics 093. A course designed for liberal arts students which includes the study of logic, mathematical patterns, mathematical recreations, systems of numeration, mathematical systems, sets and statements and sets of numbers. Historical aspects of the above topics will also be emphasized.

116 College Mathematics II 3 Cr., 3 Lec.
Prerequisite: Mathematics 115. A course designed for liberal arts students which includes the study of algebra, linear programming, permutations, combinations, probability and geometry. Historical aspects of the above topics will also be emphasized.

117 Fundamental Concepts of Mathematics for Elementary Teachers 3 Cr., 3 Lec.
A study of the structure of the real number system, geometry and mathematical analysis with emphasis on the development of basic concepts in mathematical thinking needed for elementary teachers.

121 Analytic Geometry 3 Cr., 3 Lec.
Prerequisite: Mathematics 102 or equivalent. A study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations and three-dimensional space.

126 Introductory Calculus 5 Cr., 5 Lec.
Prerequisite: Mathematics 105 or 106 or 121 or equivalent. A study of limits, continuity, derivatives, slopes, tangents, chain rule, implicit differentiation, higher derivatives, differentials, integration, applications of differential and integral calculus and trigonometric and inverse trigonometric functions.

130 Business Mathematics 3 Cr., 3 Lec.
Prerequisite: One year of high school algebra or Developmental Mathematics 091 or the equivalent. A study of simple and compound interest, bank discount, payrolls, taxes, insurance, markup and markdown, corporate securities, depreciation and purchase discounts. This course is intended primarily for specialized occupational programs.

195 Technical Mathematics 3 Cr., 3 Lec.
Prerequisite: Developmental Mathematics 091 or the equivalent. A course designed for technical students covering a general review of arithmetic; a treatment of the basic concepts and the fundamental facts of plane and solid geometry, computational techniques and devices, units and dimensions, a treatment of the terminology and concepts of elementary algebra, functions, coordinate systems, simultaneous equations, and stated problems.

202 Introductory Statistics 3 Cr., 3 Lec.
Prerequisite: Two years of high school algebra or consent of instructor. A study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability and applications to various fields.

207 Fortran Programming with Applications 3 Cr., 3 Lec.
Prerequisites: Mathematics 107 or equivalent and Mathematics 101 or Mathematics 111 or Mathematics 104 or its equivalent. Study of fortran language with emphasis on applications and programming of logarithmic language to solve numerical problems. Writing, testing and executing of typical fortran programs will be stressed. Emphasis on applications for majors and minors in engineering, the sciences, mathematics or business.

209 Introductory APL Programming 3 Cr., 3 Lec.
Prerequisites: Mathematics 107 or Mathematics 104 or Mathematics 111 and Mathematics 107 or consent of instructor. A study of APL language with emphasis on applications. This course is designed for partial fulfillment of degree requirements in computer science.

221 Linear Algebra 3 Cr., 3 Lec.
Prerequisite: Mathematics 126 or equivalent. A study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, N-dimensional space and linear transformation.
227 Mathematical Analysis I 4 Cr., 4 Lec.
Prerequisite: Mathematics 126 or equivalent. A continued study of techniques of differentiation and integration. This will include logarithmic and exponential functions, parametric equations, polar coordinates, hyperbolic functions and vectors.

228 Mathematical Analysis II 3 Cr., 3 Lec.
Prerequisite: Mathematics 227 or equivalent. A continued study of vectors, functions of several variables, partial derivatives, multiple integrals, indeterminate forms, infinite series, and an introduction to differential equations.

230 Differential Equations 3 Cr., 3 Lec.
Prerequisite: Mathematics 227 or consent of instructor. A study of ordinary differential equations. The course treats linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems and applications.

101 Freshman Theory 4 Cr., 3 Lec., 3 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.

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

104 Music Appreciation 3 Cr., 3 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.

105 Italian Diction 1 Cr., 2 Lab.
A study of the phonetic sounds of the Italian language, with selected vocabulary and little or no conversation. Primarily for voice majors.

106 French Diction 1 Cr., 2 Lab.
A study of the phonetic sounds of the French language, with selected vocabulary and little or no conversation. Primarily for voice majors.

107 German Diction 1 Cr., 2 Lab.
A study of the phonetic sounds of the language, with selected vocabulary and little or no conversation. Primarily for voice majors.

110 Music Literature 3 Cr., 3 Lec.
A course dealing with the characteristics of sound, the elements of music, performance media and musical texture as seen in the music of recognized composers in the major periods of music history. Special emphasis is given to the music of the late Gothic, Renaissance and Baroque eras.

111 Music Literature 3 Cr., 3 Lec.
Prerequisite: Music 110. A continuation of the studies introduced in Music 110. A study of the compositional procedures and forms employed by the creators of music. Attention is focused upon the music of the Classical, Romantic and Modern periods.

113 Foundations in Music I 3 Cr., 3 Lec.
Emphasis upon participation and the necessary skills for satisfactory performance in singing, playing an instrument, listening, creating rhythmic responses. Development of increasing ability to manage notation (music reading).

114 Foundations in Music II 3 Cr., 3 Lec.
Prerequisite: Music 113. Designed to help prepare students with limited music training for Music 101 or to further their general music understanding. Course emphasis will include rhythmic and melodic training, understanding of basic chord functions, melody, textures and basic analysis of music.
115 **Jazz Improvisation**  
2 Cr., 1 Lec., 2 Lab.  
An introduction to the art of improvisation. A presentation of basic materials, aural training, analysis, and a study of common practices stylistically so as to provide a foundation for the beginning improviser.

117 **Piano Class I**  
1 Cr., 2 Lab.  
Class instruction in the areas of basic musicianship and piano skills designed primarily for those with no knowledge in piano skills. Open to all students. May be repeated for credit.

118 **Piano Class II**  
1 Cr., 2 Lab.  
Includes techniques, skills, harmonization, transposition, improvisation, accompanying, sightreading and performing various styles of repertoire. Open to all students. May be repeated for credit.

119 **Guitar Class I**  
1 Cr., 2 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. May be repeated for credit.

120 **Guitar Class II**  
Prerequisite: Music 119 or the equivalent. A continuation of the skills introduced in Music 119 with emphasis on perfecting classical guitar techniques and music reading skills. May be repeated for credit.

121-143 **Applied Music — Minor**  
1 Cr., 1 Lec.  
Private instruction in the student’s secondary area. One half hour lesson a week. Open to students registered in music theory, ensembles and other music major or minor courses. Fee required. Private music may be repeated for credit.

221-241 ** Applied Music — Concentration**  
2 Cr., 1 Lec.  
Private instruction in the area of the student’s concentration. Two half hour lessons a week. Open to students registered in music theory, ensembles and other music major or minor courses. Fee required. Private music may be repeated for credit.

251-270 **Applied Music — Major**  
3 Cr., 1 Lec.  
Private instruction in the area of the student’s major instrument. Primarily for music performance majors. Two half hour lessons a week. Open to students registered in music theory, ensembles and other music major or minor courses. Fee required.

150 **Chorus**  
1 Cr., 3 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. May be repeated for credit.

151 **Voice Class I**  
1 Cr., 2 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. May be repeated for credit.

152 **Voice Class II**  
1 Cr., 2 Lab.  
A continuation of Music 151 with emphasis on solo singing, appearance in studio recital, stage deportment and personality development. Open to all non-voice majors. Two group lessons a week. May be repeated for credit.

155 **Vocal Ensemble**  
1 Cr., 3 Lab.  
A select group for mixed voices concentrating upon excellence of performance. Membership is open to any student by audition, who, in the opinion of the director, possesses special interest and skills in performance of advanced choral literature. May be repeated for credit.

160 **Band**  
1 Cr., 3 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. May be repeated for credit.

171 Woodwind Ensemble 1 Cr., 3 Lab.
Select group of instrumentalists offering experience in the reading and performance of literature for small ensembles. Membership through audition with the appropriate director. May be repeated for credit.

172 Brass Ensemble 1 Cr., 3 Lab.
Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director. May be repeated for credit.

173 Percussion Ensemble 1 Cr., 3 Lab.
Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director. May be repeated for credit.

174 Keyboard Ensemble 1 Cr., 3 Lab.
Select group of instrumentalists offering experience in the reading and performing of literature for small ensembles. Membership through audition with the appropriate director. May be repeated for credit.

185 Stage Band 1 Cr., 3 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. May be repeated for credit.

199 Recital 1 Cr., 2 Lab.
One period per week designed to allow students of private lessons an opportunity to perform before an audience. Required for all music majors and open to all other students. Credit for this course does not apply to the associate degree. May be repeated for credit.

201 Sophomore Theory 4 Cr., 3 Lec., 3 Lab.
Prerequisite: Music 101-102 or consent of instructor. A continuation of Freshman Theory, including a study of larger forms, thematic development, chromatic chords including the neapolitan sixth and augmented sixth chords, diatonic seventh chords with advanced sight-singing, keyboard harmony and ear training.

202 Sophomore Theory 4 Cr., 3 Lec., 3 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 sightsinging, keyboard harmony and ear training.

203 Composition 3 Cr., 3 Lec.
Prerequisite: Music 101 and 102. Composing in small forms for simple media in both traditional styles and styles of the student's choice. May be repeated for credit.

(See Business 160)

Office Machines
Philosophy

102 Introduction to Philosophy 3 Cr., 3 Lec.
A survey course designed to acquaint the student with some of the fundamental problems in philosophy and with methods used to deal with them. Some principle views, both ancient and modern, are examined as possible solutions.

105 Logic 3 Cr., 3 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.

202 Introduction to Social and Political Philosophy 3 Cr., 3 Lec.
Prerequisite: Three hours of philosophy or consent of instructor. An examination of the relationships of philosophical ideas to the community with emphasis on concepts of natural rights, justice, education, freedom and responsibility.
203 Ethics 3 Cr., 3 Lec.
Prerequisite: Three hours of philosophy or consent of instructor. A survey of the classical and modern theories of the moral nature of man, posing alternative views of his responsibilities to self and society. The course is designed to vivify the ethical issues and their metaphysical and epistemological bases so as to assist the student toward sound application of ethical principles in his own life.

207 History of Ancient Philosophy 3 Cr., 3 Lec.
Prerequisite: Three hours of philosophy or consent of instructor. 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.

208 History of Modern Philosophy 3 Cr., 3 Lec.
Prerequisite: Three hours of philosophy or consent of instructor. A continuation of Philosophy 207. Starting with the Renaissance, it examines Western Philosophic thought through the 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.

210 Studies in Philosophy 3 Cr., 3 Lec.
Prerequisite: Three hours of philosophy and consent of the instructor. Students will study a philosophical problem, movement, or special topic. Course topic will change each semester and may be repeated for credit.

Photography

110 Introduction to Photography and Photo-Journalism 3 Cr., 2 Lec., 4 Lab.
Introduction to photography and photojournalism. The general mechanics of camera lenses and shutters, general characteristics of the 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. Laboratory fee required.

111 Advanced Photography and Photo-Journalism 3 Cr., 2 Lec., 4 Lab.
Advanced photography and photojournalism. Utilization of everything taught in 110, with emphasis on refining techniques. Special emphasis on photographic communication. Laboratory fee required.

120 Commercial Photography I 4 Cr., 3 Lec., 3 Lab.
Commercial/or contract photography including field, studio and darkroom experience associated with social photography, portraiture and studio photography, fashion and theatrical portfolio and publicity photography and convention photography. Includes use of natural, stationary, flash and strobe artificial lights. Laboratory fee required.

121 Commercial Photography II 4 Cr., 3 Lec., 3 Lab.
Further commercial/contract assignments including publicity photography, architectural photography, interior photography and produce advertising photography. Advanced exploration in latest equipment, papers, films, print and presentation techniques. Additional exchange with sample clients, employers studios and agencies. Laboratory fee required.

Physical Education Activity

100 Lifetime Sports Activities 1 Cr., 3 Lab.
Students are provided an opportunity for participation and instruction in various lifetime sports. Selection may be made from archery, badminton, bowling, golf, handball, racquetball, softball, swimming, tennis and other sports. Activities may be offered singularly or in combinations. Instruction shall be presented at the beginner and advanced-beginner levels. The course is designed for male and female students and may be repeated for credit providing students select different activities. Laboratory fee required.
112 **Softball and Soccer** 1 Cr., 2 Lab.
Designed to provide the student an opportunity for instruction and participation in softball and soccer. Uniform required. Laboratory fee required.

115 **Physical Fitness** 1 Cr., 3 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. Co-education. May be repeated for credit. Uniform required. Laboratory fee required.

118 **Beginning Golf** 1 Cr., 2 Lab.
A co-educational course in beginning golf. Equipment furnished. No uniform required. Laboratory fee required.

119 **Beginning Tennis** 1 Cr., 2 Lab.
A co-educational course designed for the beginner. Basic tennis fundamentals will be stressed. Uniform required. Laboratory fee required.

122 **Beginning Gymnastics** 1 Cr., 2 Lab.
A co-educational course in beginning gymnastics, emphasizing basic skills in tumbling and in the various apparatus events. Uniform required. Laboratory fee required.

125 **Conditioning Exercise** 1 Cr., 3 Lab.
Enables the student to develop an understanding of exercise and its effect on the body and improve physical fitness through a variety of conditioning activities. Uniform required. Laboratory fee required.

127 **Basketball and Volleyball** 1 Cr., 2 Lab.
Techniques, rules and strategy of the game will be taught and the emphasis will be on playing the game. Uniform required. Laboratory fee required.

131 **Weight Training and Conditioning** 1 Cr., 3 Lab.
A course designed for those students who desire instruction and participation in weight training and conditioning techniques. May be repeated for credit. Uniform required. Laboratory fee required.

134 **Outdoor Education** 1 Cr., 3 Lab.
A co-educational course designed to provide students with the opportunity to gain knowledge and skills in outdoor education and camping activities through planned and incidental experiences. Including a weekend camp-out. No uniform required. Laboratory fee required.

218 **Intermediate Golf** 1 Cr., 2 Lab.
Prerequisite: Permission of instructor. A course designed to develop skills and techniques beyond the 'beginner' stage. Laboratory fee required.

219 **Intermediate Tennis** 1 Cr., 2 Lab.
Prerequisite: Permission of instructor. A course designed to develop skills and techniques beyond the 'beginner' stage. Uniform required. Laboratory fee required.

222 **Intermediate Gymnastics** 1 Cr., 2 Lab.
Prerequisite: Physical Education 122. A course designed to develop skills and techniques beyond the 'beginner' stage. Uniform required. Laboratory fee required.

257 **Advanced First Aid and Emergency Care** 3 Cr., 3 Lec.
The theory and practice in the advanced first aid and emergency care course of the American Red Cross. The course will also include various aspects of safety education.

101 **Fundamentals of Health** 3 Cr., 3 Lec.
A study of personal and community health. Emphasis placed on causative factors of mental and physical health and the means of disease transmission and prevention. For majors, minors, and students with specific interest.
144 Introduction to Physical Education 3 Cr., 3 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.

147 Sports Officiating I 3 Cr., 2 Lec., 2 Lab.
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.

148 Sports Officiating II 3 Cr., 2 Lec., 2 Lab.
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.

118 Physical Science 4 Cr., 3 Lec., 2 Lab.
A study of the basic principles and concepts of physics, chemistry and nuclear science. The course relates these basic sciences to man's physical world at an introductory level. This course is intended primarily for the non-science major. Laboratory fee required.

119 Physical Science 4 Cr., 3 Lec., 2 Lab.
The course encompasses the interaction of the earth sciences and man's physical world, geology, astronomy, meteorology and space science are emphasized through the application of selected principles and concepts of the applied sciences. The course is directed toward the non-science major. Laboratory fee required.

111 Introductory General Physics 4 Cr., 3 Lec., 3 Lab.
Prerequisite: Two years high school algebra, including trigonometry or equivalent. The first semester of a two semester course designed for pre-dental, biology, pre-medical, pre-pharmacy, and pre-architecture majors and other students who require a two-semester technical course in physics. This course includes a study of mechanics and heat. Laboratory includes one hour problem session. Laboratory fee required.

112 Introductory General Physics 4 Cr., 3 Lec., 3 Lab.
Prerequisite: Physics 111. A continuation of Physics 111 which includes the study of electricity, magnetism, light, and sound. Laboratory includes one hour problem session. Laboratory fee required.

117 Concepts in Physics 4 Cr., 3 Lec., 3 Lab.
An essentially non-mathematical introduction to the principles of physics intended to satisfy laboratory science requirements for the non-science major. Emphasis is placed on the historical developments of classical mechanics and thermodynamics, and the effects discoveries in these areas have on day to day experiences. Especially emphasized is the principle of conservation of energy, and the current difficulties encountered in solving the pressing problems of world-wide energy production. Laboratory fee required.

118 Concepts in Physics 4 Cr., 3 Lec., 3 Lab.
An essentially non-mathematical introduction to the principles of physics intended to satisfy laboratory science requirements for the non-science major. Emphasis is placed on modern developments in physics, and the effects these discoveries have on present day problems. Course content is purposely made flexible to permit discussion of new developments in physics. The course is structured around topics in acoustics, electricity and magnetism light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee required.

131 Applied Physics 4 Cr., 3 Lec., 3 Lab.
Prerequisite: Mathematics 195 or concurrent enrollment in Mathematics 195. The first half of a one year course designed to explain the basic concepts of the property of matter, mechanics, and heat. Emphasis will be placed on applications and problem solving.
Designed primarily for students enrolled in technical programs. Laboratory includes a one hour problem session. Laboratory fee required.

132 Applied Physics 4 Cr., 3 Lec., 3 Lab.  
Prerequisite: Physics 131. A continuation of Physics 131 designed to explain basic concepts in the areas of sound, light, electricity, magnetism and atomic theory. Laboratory fee required.

201 General Physics 4 Cr., 3 Lec., 3 Lab.  
Prerequisite: Credit or concurrent registration in Mathematics 126. Principles and applications of mechanics, wave motion, and sound emphasizing fundamental concepts, problem solving, notation, and units. Designed primarily for physics, chemistry, mathematics and engineering majors. Laboratory includes a one hour problem session. Laboratory fee required.

202 General Physics 4 Cr., 3 Lec., 3 Lab.  
Prerequisites: Physics 201 and credit or concurrent registration in Mathematics 227. Principles and applications of heat, electricity, magnetism and optics emphasizing fundamentals, concepts, problem solving, notation and units. Laboratory includes a one hour problem session. Laboratory fee required.

105 Introduction to Psychology 3 Cr., 3 Lec.  
A study of basic problems and principles of human experience and behavior; such areas as heredity and environment, the nervous system, motivation, learning, emotions, thinking and intelligence are included. (This course is offered on campus and may be offered via television.)

131 Human Relations 3 Cr., 3 Lec.  
A study involving the direct application of psychological principles to human relations problems in business and industry. Consideration is given to group dynamics and adjustment factors related to employment and advancement. The presentation will be tailored to fit the needs of the students enrolled in each section.

201 Developmental Psychology 3 Cr., 3 Lec.  
Prerequisite: Psychology 105. A study of human growth, development and behavior, emphasizing the psychological changes which occur during the life pattern. The processes of life from prenatal beginnings to adulthood are treated in an integrated manner. Due attention is given to aging and its place in the developmental sequence. (This course is offered on campus and may be offered via television.)

205 Psychology of Personality 3 Cr., 3 Lec.  
Prerequisite: Psychology 105. A consideration of the important factors involved in successful human adjustment including child-parent relationships, adolescence, anxiety states, mechanisms of defense and psychoanalytic concepts. The course includes a survey of methods of personality measurement.

207 Social Psychology 3 Cr., 3 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 sociopsychological process, attitude formation and change, interpersonal relations, and group processes. The student may register for either Psychology 207 or Sociology 207, but may receive credit for only one of the two.

101 Effective College Reading 3 Cr., 3 Lec.  
Reading 101 emphasizes comprehension techniques in reading fiction and non-fiction. Improved critical reading skills including analysis, critique and evaluation of written material are explored. Reading comprehension and flexibility of reading rate are stressed. In addition, advanced learning techniques in listening, note-taking, underlining, concentration and reading in specialized academic areas are developed.

102 Speed Reading/Learning 3 Cr., 3 Lec.  
This course emphasizes improved critical reading/learning skills utilizing and aggressive, dynamic approach. Reading comprehension is stressed using speed reading techniques. Learning and memory depth skills are taught. Offered in a laboratory setting.
Real Estate Principles 3 Cr., 3 Lec.
Fundamental principles covering the broad subject of real estate together with real estate law and operating procedures applicable to the state of Texas. This course of study shall include but not be limited to the following: Arithmetical calculations as used in real estate transactions; rudimentary principles of conveyancing; the general purposes and effect of deeds, deeds of trust, mortgages, land contracts of sales, leases, liens, and listing contracts; elementary principles of land economics and appraisals; fundamentals of obligations between principal and agent; principles of real estate practice and canons of ethics pertaining thereto; and the provisions of this act and rules and regulations of the commission.

Real Estate Finance 3 Cr., 3 Lec.
Prerequisites: Credit in or concurrent enrollment in Real Estate 120. Procedures in financing real estate sales, obtaining funds, legal aspects of mortgages and related instruments. Also problems and cases in real estate finance.

Real Estate Marketing 3 Cr., 3 Lec.
Prerequisites: Real Estate 130, 131, 136. A study of the principles and techniques of marketing in the field of real estate. Emphasizing professional procedures used in real property transactions to the satisfaction of all parties concerned. Also an analysis of the agency relationship between the agent and principal, product knowledge, prospective markets, customer prospecting, planning the sales presentation, meeting the prospect, overcoming sales resistance, closing the sale and building goodwill. Practical application provided through use of case studies, and preparing listing and sales contracts.

Real Estate Appraisal 3 Cr., 3 Lec.
Prerequisites: Real Estate 130, 131 and 133. Principles and methods of appraisal generally used in establishing the market value of real estate along with the knowledge skills necessary for application or interpretation.

Real Estate Law 3 Cr., 3 Lec.
Prerequisite: Real Estate 130 or consent of instructor. Emphasizes the more complex aspects of real estate law as encountered by those concerned with real estate transactions. Practical application relating to ownership, use and transfer of real property, enforceability of contractual rights, and the impact of litigation affecting title to real property.

Real Estate Office Management 3 Cr., 3 Lec.
Prerequisite: Real Estate 130, 131, 133, 135, 136 or consent of instructor. Overall management procedures of operating a real estate office. In-depth study of office procedures, relations, communications, and ethics.

Commercial and Investment Real Estate 3Cr., 3 Lec.
Prerequisites: Real Estate 130, 131, 133, 135, 136 or instructor's approval and real estate marketing. Basic insight into commercial and investment real estate, including syndication, 'joint venture' or group ownership of real estate, selection, financing, and management of the investor.

Property Management 3Cr., 3 Lec.
Prerequisites: Real Estate 130, 131, 133, 135, 136 and real estate marketing or instructor's approval. Basic management techniques on how to attract and keep tenants and maintain property while obtaining the highest level of income; developing-executing-evaluation; legal aspects; property analysis; location factors; employee relations; market, income and expense analysis; maintenance and housekeeping; tenant credits and collections; management of office, records and accounting; management of various kinds of real estate including single and multi-family, retail and commercial properties.

Real Estate Internship I 4 Cr., 20 Lab.
Prerequisite: Real Estate 130, 131, 133, real estate marketing and concurrent enrollment in Real Estate 254. Must submit application to
instructor, be interviewed and approved prior to registration. Internship training and application of principles and skills. Under supervision of the employer/sponsor and a member of the real estate faculty. Job-related studies and independent research.

251 Real Estate Internship II 4 Cr., 20 Lab. 
Prerequisite: Real Estate 130, 131, real estate marketing and concurrent enrollment in Real Estate 255. Must submit application to instructor, be interviewed and approved prior to registration. Internship training and application of principles and skills in student's chosen field. Under supervision of the employer/sponsor and a member of the real estate faculty. Job-related studies and independent research.

254 Real Estate Seminar I 2 Cr., 2 Lec. 
Prerequisite: Real Estate 130, 131, real estate marketing and concurrent enrollment in Real Estate 250 and preliminary interview by real estate faculty. Problem analysis and project development for students majoring in real estate. Individual and group study of a particular area on problem beyond the scope of regularly offered courses.

255 Real Estate Seminar II 2 Cr., 2 Lec. 
Prerequisite: Real Estate 130, 131, real estate marketing and concurrent enrollment in Real Estate 251 and preliminary interview by real estate faculty. Business strategy and the decision making process applied to trends in the real estate profession. Specific emphasis will be placed upon the application of the intern's course knowledge and work experiences.

101 Religion in American Culture 3 Cr., 3 Lec. 
A systematic examination of religion in American culture. Emphasis upon the characteristics of American religion, and objective study of various religious groups, and an examination of the relation of religion to the arts and other cultural phenomena.

102 Contemporary Religious Problems 3 Cr., 3 Lec. 
Deals with both classic and recent issues such as the nature of religion itself, the existence of God, the encounter of world religions, mysticism, sexuality and religion and the interpretation of death. Sometimes offered with emphasis on a limited topic such as death and dying.

201 Major World Religions 3 Cr., 3 Lec. 
Prerequisite: Sophomore standing or consent of instructor recommended. A survey of major world faiths, the course will concentrate on the basic texts of eastern and western religions and on the creative personalities of their founders. There will be some consideration of the problems of 'objective' study of religions, of primitive religions and of alternatives to major world religions such as astrology and atheism.

(See Business 162)

(See Business 159, 166, 266)

131 American Civilization 3 Cr., 3 Lec. 
A course designed to provide the student with some historical perspective for understanding the economic, political, and social institutions of modern society. In this context, emphasis will be placed upon U.S. and Texas history and constitutional development. It is advised that these courses be taken in order: 131, 132.

132 American Civilization 3 Cr., 3 Lec. 
A continuation of Social Science 131.

101 Introduction to Sociology 3 Cr., 3 Lec. 
An inquiry into the nature of society and the foundations of group life, including institutions, with a broad presentation of the basis of social change, processes and problems.

102 Social Problems 3 Cr., 3 Lec. 
Prerequisite: Sociology 101 or consent of instructor. A study of the background, emergence and scope of current group relationships in
our society, emphasizing topics as they apply to the total community environment.

203 **Marriage and Family**  
**Prerequisite:** Sociology 101 recommended. An analysis of courtship patterns, marriage and family forms, relationships and functions and sociocultural differences in family behavior.

204 **American Minorities**  
**Prerequisite:** Sociology 101 and/or six hours of U.S. History recommended. The principal minority groups in American society: Their sociological significance and historic contributions. An emphasis will be placed on problems of intergroup relations, social movements and related social changes occurring on the contemporary American scene. The student may register for either History 204 or Sociology 204.

207 **Social Psychology**  
**Prerequisites:** Psychology 105 and/or Sociology 101. The student may elect the subject area reading appropriate to his major. The student may register for either Psychology 207 or Sociology 207 by may receive credit in only one of the two.

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### Spanish

101 **Beginning Spanish**  
4 Cr., 3 Lec., 2 Lab.  
Essentials of grammar, easy idiomatic prose, stress on pronunciation, comprehension and oral expression. Laboratory fee required.

102 **Beginning Spanish**  
4 Cr., 3 Lec., 2 Lab.  
**Prerequisite:** Spanish 101 or equivalent. Continuation of Spanish 101 with emphasis on idiomatic language and complicated syntax. Laboratory fee required.

201 **Intermediate Spanish**  
3 Cr., 3 Lec.  
**Prerequisite:** Spanish 102 or equivalent or consent of the instructor. Reading, composition, grammar review and intense oral practice.

202 **Intermediate Spanish**  
3 Cr., 3 Lec.  
**Prerequisite:** Spanish 201 or equivalent. Continuation of Spanish 201 with reading selections drawn more directly from contemporary literary sources. Composition.

203 **Introduction to Spanish Literature**  
3 Cr., 3 Lec.  
**Prerequisite:** Spanish 202 or equivalent or consent of the instructor. Readings in Spanish literature, history, culture, art and civilization.

204 **Introduction to Spanish Literature**  
3 Cr., 3 Lec.  
**Prerequisite:** Spanish 202 or equivalent or consent of the instructor. Readings in Spanish literature, history, culture, art and civilization.

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### Speech

100 **Speech Laboratory**  
1 Cr., 3 Lab.  
A laboratory course for the preparation of speeches, reading of dialogue from literature and debate propositions which will be presented throughout the community. May be repeated for one additional hour of credit each semester.

105 **Fundamentals of Public Speaking**  
3 Cr., 3 Lec.  
An introductory course in public speaking. Principles of reasoning. Emphasis upon the delivery of carefully prepared speeches. Special attention to audience analysis, collection of materials and outlining.

109 **Voice and Articulation**  
3 Cr., 3 Lec.  
A study of the mechanics of speech applied to the improvement of the individual's voice and pronunciation.

110 **Reader's Theatre Workshop**  
1 Cr., 2 Lab.  
A laboratory course for the preparation and presentation of scripts, readings, and book reviews, collecting and arranging all types of literature for group interpretation and performance. May be repeated once for credit.

201 **Forensic Workshop**  
1 Cr., 2 Lab.  
A laboratory course for the preparation of speeches, readings, and debate propositions which will be presented in competition and before select audiences. May be repeated for one additional unit of credit.
205 **Discussion and Debate** 3 Cr., 3 Lec.
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.

206 **Oral Interpretation** 3 Cr., 3 Lec.
A study of fundamental techniques of analyzing various types of literature and practice in preparing and presenting selections orally. Emphasis on individual improvement.

207 **Advanced Oral Interpretation** 3 Cr., 3 Lec.
Prerequisites: Speech 105 and 206. Application of basic principles of interpretation to longer selections of literature: More detailed analysis and arranging of poetry and prose for various types of multiple reading situations including choral speaking and reader's theatre. Investigation of all types of literature which are suited to group interpretation work.

100 **Rehearsal and Performance** 1 Cr., 4 Lab.
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. May be repeated for credit. Credit limited to one hour per semester.

101 **Introduction to the Theatre** 3 Cr., 3 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.

102 **Contemporary Theatre** 3 Cr., 3 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.

103 **Stagecraft I** 3 Cr., 2 Lec., 3 Lab.
A study of the technical aspects of play production including set design and construction, stage lighting, make-up, costuming and related areas.

104 **Stagecraft II** 3 Cr., 2 Lec., 3 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.

105 **Make-up for the Stage** 3 Cr., 3 Lec.
Theory and practice of the craft of make-up. Laboratory fee required.

106 **Acting I** 3 Cr., 2 Lec., 3 Lab.
Individual and group activity with theory and exercises in body control, voice, pantomime, interpretation, characterization and stage movement. Analysis and study of specific roles for stage presentation.

107 **Acting II** 3 Cr., 2 Lec., 3 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.

108 **Movement for the Stage** 3 Cr., 2 Lec., 3 Lab.
A study of movement as both a pure form as well as its relation and integration with the theatre arts. The course will include movement as a technique to control balance, rhythm, strength, and flexibility. Movement will be explored as it is used in all the theatrical forms and in development of characterization. May be repeated for credit.

109 **Voice and Articulation** 3 Cr., 3 Lec.
Same as Speech 109. The student may not receive credit for both Theatre 109 and Speech 109.

110 **History of Theatre I** 3 Cr., 3 Lec.
Survey of theatre from its beginning through the sixteenth century. Study of the theatre in each period as a part of the total culture of the period.
111 History of Theatre II  
Development of the theatre from the seventeenth century through the twentieth century.

112 Beginning Dance Technique in Theatre  
Course designed to promote body balance, improve manipulation of trunk and limbs, and facilitate the rhythmic flow of physical energy. Exploration of basic movements of the dance with emphasis on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements.

113 Intermediate Dance  
Prerequisite: Theatre 112 or permission of instructor. A general survey to acquaint the student with the various aspects of dance and its role in total theatre, including the evolution of dance styles. Exploration of jazz style emphasizing flow of movement, body placement, dynamic intensity, level, focus, and direction.

115 Mime  
Prerequisite: Stage movement, Theatre 106. Exploration of the expressive significance and techniques of mime.

199 Demonstration Lab.  
One hour a week course designed to allow the theatre student an opportunity to practice the theory learned in specific theatre classes before an audience. Scenes studied in various drama classes will show contrast and the different perspectives. Required of all drama students — open to all students.

205 Scene Study (Theatre)  
Prerequisites: Theatre 106, 107. Continuation of Acting II with emphasis on developing character through detailed study of the playscript. Students will deal with the stylistic problems presented by the staging of period plays and the development of early realism.

207 Scene Study II  
Prerequisite: Theatre 205. Continuation and intensification of Theatre 205 with concentration upon individual needs of the performer. Conference and scheduled rehearsals in preparation for scene work.

208 Introduction to Technical Drawing  
Prerequisites: Theatre 103 and 104. Basic techniques of drawing for theatrical design and construction.

209 Lighting Design  
Prerequisites: Theatre 103 and 104. A study of design and techniques of lighting in the theatre. Practical experience in departmental productions required for one semester.

235 Costume History  
Prerequisite: Theatre 110 or 111. The study of costumes and their use on the stage from the earliest times to the present.

Typing

Word Processing

Work Experience

(See Business 172, 174, 273)

(See Business 165 and 265)

(See Cooperative Work Experience)
## TECHNICAL OCCUPATIONAL PROGRAMS

Career Programs offered in the Dallas County Community College District.

### North Lake
- **Accounting Associate**
- **Accounting Technician**
- **Air Conditioning & Refrigeration**
  - Commercial Refrigeration & Air Conditioning
  - Residential Air Conditioning
- **Banking & Finance**
- **Building Trades**
  - Carpentry
    - Commercial
    - Residential
  - Electrical
- **Diesel Mechanics**
- **Distribution Technology**
- **Mid-Management**
  - Small Business Management
- **Office Occupations**
  - General Office Careers
  - Secretarial Careers
  - Legal Secretarial
- **Real Estate**

### Brookhaven
- **Accounting Associate**
- **Accounting Technician**
- **Auto Body**
- **Automotive Technology**
- **Auto Parts Specialist**
- **Child Development**
- **Mid-Management**
- **Retail Distribution & Marketing (3 Options)**
- **Secretarial Careers**
- **Air Conditioning & Refrigeration Technology**
- **Auto Body**
- **Automotive Technology**
- **Child Development Associate**
- **Child Development Assistant**
- **Digital Electronics**
- **Drafting & Design**
- **Graphic Arts**
- **Graphic Communications**
- **Mid-Management**
  - Small Business Management
- **Social Work Associate**
- **Office Careers**
  - Administrative Secretary
  - General Secretary
  - Professional Secretary
  - Office Skills & Systems
- **Training Paraprofessionals for the Deaf**
- **Transportation Technology**
- **Welding Technology**

### Cedar Valley
- **Accounting Associate**
- **Accounting Technician**
- **Air Conditioning & Major Appliance Repair**
  - Commercial
  - Residential
- **Animal Medical Technology**
- **Automotive Technology**
- **Commercial Music**
  - Composer/Arranger/Copyist
  - Music Retailing
  - Performing Musician
- **Major Appliance Repair**
- **Mid-Management**
  - Small Business Management
- **Motorcycle Mechanics**
- **Office Occupations**
  - General Office
  - Secretarial Careers
- **Outboard Marine Engine Mechanics**
- **Retail Distribution & Marketing Technology**
  - Commercial Design & Advertising
  - Fashion Merchandising
  - Retail Management
  - Small Engine Mechanics
- **Hotel/Motel Operations**
- **Interior Design**
- **Legal Assistant**

### Eastfield
- **Accounting Associate**
- **Accounting Technician**
- **Air Conditioning & Refrigeration Technology**
  - Commercial Refrigeration & Air Conditioning
  - Residential Air Conditioning
- **Banking & Finance**
- **Building Trades**
  - Carpentry
    - Commercial
    - Residential
  - Electrical
- **Diesel Mechanics**
- **Distribution Technology**
- **Mid-Management**
  - Small Business Management
- **Office Occupations**
  - General Office Careers
  - Secretarial Careers
  - Legal Secretarial
- **Real Estate**

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86
Dallas County residents may enroll in the programs listed below at the appropriate Tarrant County Junior College at the Tarrant County resident's tuition rate.

<table>
<thead>
<tr>
<th>Program</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agribusiness</td>
<td>Northwest Campus</td>
</tr>
<tr>
<td>Aviation Maintenance Technician</td>
<td>Northwest Campus</td>
</tr>
<tr>
<td>Civil Technology</td>
<td>Northeast Campus</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>Northeast Campus</td>
</tr>
<tr>
<td>Emergency Medical Technician</td>
<td>Northeast Campus</td>
</tr>
<tr>
<td>Fashion Merchandising</td>
<td>Northeast Campus</td>
</tr>
<tr>
<td>Industrial Supervision</td>
<td>South Campus</td>
</tr>
<tr>
<td>Instructional Media</td>
<td>Northeast Campus</td>
</tr>
<tr>
<td>Labor Studies</td>
<td>Northeast Campus</td>
</tr>
<tr>
<td>Physical Therapy Technology</td>
<td>Northeast Campus</td>
</tr>
<tr>
<td>Postal Service Administration</td>
<td>Northwest Campus</td>
</tr>
</tbody>
</table>

Technical/Occupational Programs at Tarrant County Junior College
Accounting Careers is designed to provide the student with a working knowledge of bookkeeping procedures currently in use in business; to introduce accounting principles supporting bookkeeping procedures; and to give you practical bookkeeping experience by the use of problem solving.

CERTIFICATE PROGRAM — ACCOUNTING TECHNICIAN

Courses required for a Certificate of Completion are listed below. The courses may be taken in any order provided that prerequisites have been met. Students should check the course descriptions in the catalog to determine which courses have prerequisites.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Lec</th>
<th>Lab</th>
<th>Cr</th>
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</thead>
<tbody>
<tr>
<td>BUS 105</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>BUS 160</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>COM 131</td>
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<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
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<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Lec</th>
<th>Lab</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 132</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 172</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 174</td>
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<td></td>
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</tr>
<tr>
<td>CS 175</td>
<td>3</td>
<td>0</td>
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<tr>
<td>COM 132</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Elective*</td>
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<td></td>
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</tbody>
</table>

*Recommended Electives:
PSY 131 Human Relations
BUS 231 Business Correspondence
BUS 162 Secretarial Training
BUS 234 Business Law

BUS 201 — Principles of Accounting I may be substituted for BUS 121 and BUS 132.

ASSOCIATE DEGREE PROGRAM

This program is designed to prepare the student for a career as a junior accountant in business, industry, and government. Emphasis will be placed on internal accounting procedures and generally accepted accounting principles as they relate to external reporting with selected electives in cost accounting and tax accounting.

Courses required for an Associate in Applied Arts and Sciences Degree are listed below. The courses may be taken in any order provided that prerequisites have been met. Students should check the course descriptions in the catalog to determine which courses have prerequisites.

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Lec</th>
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<th>Cr</th>
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<tbody>
<tr>
<td>BUS 201</td>
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<td>3</td>
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<tr>
<td>BUS 105</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 160</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>COM 131</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or MMT 111</td>
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</table>
## Spring Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BUS 202</td>
<td>Principles of Accounting II</td>
<td>3</td>
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<tr>
<td>BUS 136</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>CS 175</td>
<td>Introduction to Computer Sciences</td>
<td>3</td>
</tr>
<tr>
<td>COM 132</td>
<td>Applied Composition and Speech</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 102</td>
<td>Composition and Literature</td>
<td></td>
</tr>
<tr>
<td>ENG 172</td>
<td>Beginning Typing</td>
<td>2</td>
</tr>
<tr>
<td>or BUS 174</td>
<td>Intermediate Typing</td>
<td>3</td>
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**Total:** 14/15

## Fall Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 203</td>
<td>Intermediate Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 238</td>
<td>Cost Accounting</td>
<td>3</td>
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<tr>
<td>or BUS 239</td>
<td>Income Tax Accounting</td>
<td></td>
</tr>
<tr>
<td>GVT 201</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 803 or</td>
<td>Work Experience</td>
<td>3-4</td>
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<tr>
<td>or BUS 804</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>or Elective*</td>
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</table>

**Total:** 15/16

## Spring Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 204</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 234</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 231</td>
<td>Business Correspondence</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 237</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BUS 813 or</td>
<td>Work Experience</td>
<td>3-4</td>
</tr>
<tr>
<td>or BUS 814</td>
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<td>3-4</td>
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<tr>
<td>or Elective*</td>
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</tr>
</tbody>
</table>

**Total:** 18/19

*Recommended Electives:
- BUS 205 Business Finance
- BUS 238 Cost Accounting
- BUS 239 Income Tax Accounting
- BUS 206 Principles of Marketing
- PSY 105 Introduction to Psychology
- BUS 143 Personal Finance
- PSY 131 Human Relations

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This program is designed to prepare the student for entry level employment in the Air Conditioning and Refrigeration Industry. Two options are available in this program: Residential Air Conditioning and Commercial Refrigeration and Air Conditioning. The student will develop the skills and knowledge necessary to install, repair and maintain equipment related to these options.

Some air conditioning courses are completely individualized. This allows the students to progress at their own pace in order to fully comprehend theory and develop the necessary skills. Individualized, self-paced instruction also allows the student to take a portion of a course (module) without taking the complete course, if some specific knowledge or skill is desired.

Students may elect to receive a certificate or may apply the certificate courses required in this program toward an Associate in Applied Arts and Sciences Degree.

### CERTIFICATE PROGRAM

A Certificate of Completion may be obtained in one or both of the options in the Air Conditioning Program. In order to qualify for a certificate, the student must successfully complete the core courses in addition to those listed for the specific option. The courses may be taken in any order desired after consultation with the instructor.
### Core Courses (Required of all students)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC 400</td>
<td>Basic Electricity</td>
<td>180</td>
<td>6</td>
</tr>
<tr>
<td>or all of the following five courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC 401</td>
<td>Basic Units of Measurement and Measuring Device</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 402</td>
<td>Simple Schematics and Circuits</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 403</td>
<td>Circuit Components</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 404</td>
<td>Complex Schematics and Circuits</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>AC 405</td>
<td>A.C. Motor Fundamentals</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 410</td>
<td>Basic Refrigeration</td>
<td>300</td>
<td>10</td>
</tr>
<tr>
<td>or all of the following eight courses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC 411</td>
<td>Elementary Thermodynamics and Physics</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 412</td>
<td>Heat Transfer and Air Properties</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 413</td>
<td>Refrigerants and Refrigerant Properties</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 414</td>
<td>The Vapor Compression System and Accessories</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>AC 415</td>
<td>Piping and Fittings</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 416</td>
<td>Leak Detection, Leak Repair and Evacuation — Basic Refrigeration</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 417</td>
<td>The Pressure — Enthalpy Diagram</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 418</td>
<td>Charging and Discharging the System</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Mth 195</td>
<td>Technical Mathematics</td>
<td>48</td>
<td>3</td>
</tr>
</tbody>
</table>

### COMMERCIAL REFRIGERATION AND AIR CONDITIONING CERTIFICATE OPTION

The student will develop skills in diagnosing, servicing, checking, installing and repairing both electrical and mechanical components of Commercial Refrigeration and Industrial Air Conditioning Systems.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC 450</td>
<td>Commercial Refrigeration</td>
<td>360</td>
<td>12</td>
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<tr>
<td>or all of the following ten courses:</td>
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<td></td>
<td></td>
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<tr>
<td>AC 449</td>
<td>Electric Motors and Starting Devices — Commercial Refrigeration</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 451</td>
<td>Refrigeration Systems</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>AC 452</td>
<td>Multiple Systems</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 453</td>
<td>Piping and the Refrigerant Circuit — Commercial Refrigeration</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 454</td>
<td>Flow Control &amp; Pressure Control Devices</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 455</td>
<td>Moisture Problems &amp; Defrost Systems</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 456</td>
<td>Load Calculations — Commercial Refrigeration</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 457</td>
<td>The Refrigeration Charge and System Performance</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 458</td>
<td>Leak Detection, Leak Repair and Evacuation — Commercial Refrigeration</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 459</td>
<td>The Electrical Circuit and Control Devices — Commercial Refrigeration</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 460</td>
<td>Industrial Air Conditioning</td>
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<tr>
<td>or all of the following twelve courses:</td>
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<td></td>
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</tr>
<tr>
<td>AC 461</td>
<td>Absorption Systems</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 462</td>
<td>Vapor Compression Systems</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>AC 463</td>
<td>Multiple Systems, Flow Control and Pressure Control Devices</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 464</td>
<td>Applied Psychrometrics and System Performance</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 465</td>
<td>Air Distribution — Industrial Air Conditioning</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 466</td>
<td>Leak Detection, Leak Repair and Evacuation — Industrial Air Conditioning</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 467</td>
<td>Piping and the Refrigerant Circuit — Industrial Air Conditioning</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>AC 468</td>
<td>Electrical Circuits and Control Devices — Industrial Air Conditioning</td>
<td>30</td>
<td>1</td>
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</tbody>
</table>
AC 469 Pneumatic Control Systems 30 1
AC 477 Boilers — Combustion Process 30 1
AC 478 Boiler Electrical Circuits 30 1
AC 479 Hydronic Systems 30 1

**AC 703 Work Experience**

| Minimum hours for Commercial Certificate option | 1548 48 |

**RESIDENTIAL AIR CONDITIONING CERTIFICATE OPTION**

The student will develop skills in diagnosing, checking, servicing, installing and repairing both electrical and mechanical components or residential cooling and heating systems; the student will also make load calculations, select equipment and design residential air distribution systems.

**AC 420 Residential A/C Units — Cooling**

or all of the following ten courses:

- AC 419 Electric Motors 30 1
- AC 421 Properties of Air 30 1
- AC 422 Heat Transfer and the Cooling Load 30 1
- AC 423 The Refrigeration System — Residential Cooling 90 3
- AC 424 Refrigerant Circuit Piping 30 1
- AC 425 Leak Detection, Leak Repair and Evacuation — Residential Cooling 30 1
- AC 426 Introduction to Condensing Water Systems 30 1
- AC 427 Air Distribution — Residential Cooling 30 1
- AC 428 System Performance and the Refrigerant Charge 30 1
- AC 429 Complex Electrical Circuits 30 1

**AC 430 Residential A/C Units — Heating**

or all of the following seven courses:

- AC 431 Air Properties and Air Loads 30 1
- AC 432 The Warm-Air Furnace — Gas 60 2
- AC 433 The Warm-Air Furnace — Electric 30 1
- AC 434 Air Distribution — Residential Heating 30 1
- AC 435 The Heat Pump 30 1
- AC 436 The Electrical Circuit & Schematics 30 1
- AC 437 Electrical Motors and Starting Devices — Residential Heating 30 1

**AC 440 Residential Systems Design**

or all of the following five courses:

- AC 441 Structural Blueprints 30 1
- AC 442 Load Calculations — Heating 30 1
- AC 443 Load Calculations — Cooling 30 1
- AC 444 Equipment Selection & Location 30 1
- AC 445 Air Distribution System 60 2

**AC 703 Work Experience**

| Minimum hours for Residential Certificate option | 1548 48 |

**ASSOCIATE DEGREE PROGRAM**

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in Residential Air Conditioning or Commercial Refrigeration and Air Conditioning must complete all of the courses for the certificate program for that specific option in addition to the courses listed as follows:

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 131 Applied Communications &amp; Speech</td>
<td>48 3</td>
</tr>
<tr>
<td>PHY 131 Applied Physics</td>
<td>96 4</td>
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</table>
Six hours of electives are required and shall be selected from the following list of courses.

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<tr>
<th>Course</th>
<th>Contact Hours</th>
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<tbody>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>48</td>
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<tr>
<td>PSY 131 Human Relations</td>
<td>48</td>
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<tr>
<td>BUS 105 Introduction to Business</td>
<td>48</td>
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<tr>
<td>BUS 131 Bookkeeping</td>
<td>48</td>
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<tr>
<td>BUS 136 Principles of Management</td>
<td>48</td>
<td>3</td>
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<tr>
<td>BUS 153 Small Business Management</td>
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<tr>
<td>AC 803 Work Experience</td>
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<tr>
<td>or 804</td>
<td>320</td>
<td>or 4</td>
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Minimum hours for Associate Degree: 1900 or 66

Banking and Finance

The Banking and Finance program is designed to prepare students for entry or advancement into the field of financial institutions. The curriculum offers three specialized options including: Banking, Savings and Loan and Credit Management.

Successful completion of this program leads to the Associate in Applied Arts and Sciences Degree.

ASSOCIATE DEGREE PROGRAM — BANKING OPTION

<table>
<thead>
<tr>
<th>Semester</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
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<tr>
<td><strong>Fall Semester I</strong></td>
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<tr>
<td>BF 103 Introduction to Banking</td>
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<tr>
<td>COM 131 Applied Composition and Speech</td>
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<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
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<tr>
<td><strong>Spring Semester I</strong></td>
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<tr>
<td>BF 104 Money and Banking</td>
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<td>BF 105 Comparative Financial Institutions</td>
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<td>BUS 201 Principles of Accounting I</td>
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<td>ECO 202 Principles of Economics II</td>
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<td>GVT 201 American Government</td>
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<tr>
<td><strong>Fall Semester II</strong></td>
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<tr>
<td>BUS 237 Organizational Behavior</td>
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<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
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<tr>
<td><strong>Spring Semester II</strong></td>
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<tr>
<td>BF 204 Federal Regulations of Banking*</td>
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<tr>
<td>or BF 205 Analyzing Financial Statements*</td>
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<tr>
<td>or BF 206 Negotiable Instruments and the Payments Mechanism*</td>
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<tr>
<td>BF 203 Public Relations &amp; Marketing of Financial Services</td>
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### Banking Functions Electives

<table>
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<th>Lec Hrs</th>
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<td>BF 110 The Federal Reserve System</td>
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<td>BF 111 Trust Functions and Services</td>
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<td>BF 112 Installment Credit</td>
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<td>BF 113 Credit Card Banking</td>
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<td>BF 114 Teller Training</td>
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<tr>
<td>BF 115 Credit and Collection Principles</td>
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<td>BF 116 Construction Lending</td>
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<tr>
<td>BF 117 Letters of Credit</td>
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<tr>
<td>BF 118 Installment Loan Interviews</td>
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<tr>
<td>BF 119 New Accounts</td>
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<td>BF 120 Selling Bank Services</td>
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<td>BF 121 Loss Prevention</td>
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<td>BF 122 Safe Deposit</td>
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<tr>
<td>BF 123 Loan and Discount</td>
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<td>BF 124 Stocks and Bonds</td>
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<tr>
<td>RE 131 Real Estate Finance</td>
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### General Electives

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<thead>
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<tbody>
<tr>
<td>BUS 209 Principles of Insurance</td>
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<td>3</td>
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<tr>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>MTH 130 Business Math</td>
<td>3</td>
<td>0</td>
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<tr>
<td>BUS 143 Personal Finance</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>BUS 159 Beginning Shorthand</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>BUS 160 Office Machines</td>
<td>3</td>
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<tr>
<td>BUS 162 Office Procedures</td>
<td>3</td>
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<tr>
<td>BUS 166 Intermediate Shorthand</td>
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<tr>
<td>BUS 172 Beginning Typing</td>
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<tr>
<td>BUS 174 Intermediate Typing</td>
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<tr>
<td>BUS 234 Business Law</td>
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<tr>
<td>BF 713, 803, 813 Cooperative Work Experience 2</td>
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<td>15</td>
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</tbody>
</table>

1. Course may be offered through American Institute of Banking (AIB)
2. Enrollment only with consent of instructor
3. Students may substitute Principles of Bank Operations (taken through the American Institute of Banking)

### ASSOCIATE DEGREE PROGRAM — CREDIT AND FINANCIAL MANAGEMENT OPTION

#### Fall Semester I

- BF 101 Credit Management: 3 hours
- COM 131 Applied Composition and Speech: 3 hours
- BUS 136 Principles of Management: 3 hours
- ECO 201 Principles of Economics I: 3 hours
- Elective*: 3 hours

#### Spring Semester I

- BF 115 Credit and Collection Principles: 3 hours
- BUS 234 Business Law: 3 hours
- ECO 202 Principles of Economics II: 3 hours
- CS 175 Introduction to Computer Science: 3 hours
- BF 105 Comparative Financial Institutions: 3 hours

#### Fall Semester II

- BF 201 Advanced Credit Analysis: 3 hours
- BUS 237 Organizational Behavior: 3 hours
### Spring Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
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<tbody>
<tr>
<td>BF 202 Credit Law</td>
<td>3</td>
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<td>BF 203 Public Relations and Marketing of Financial Services</td>
<td>3</td>
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<tr>
<td>BUS 231 Business Correspondence</td>
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<td>0</td>
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<tr>
<td>BUS 202 Principles of Accounting II</td>
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<td><strong>Total</strong></td>
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**Electives (9 credits required for Associate Degree)**

<table>
<thead>
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<th>Course</th>
<th>Lec Hrs</th>
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<tbody>
<tr>
<td>BF 205 Analyzing Financial Statements*</td>
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<tr>
<td>BF 104 Money and Banking*</td>
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<tr>
<td>BUS 209 Principles of Insurance*</td>
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<td>MTH 130 Business Math</td>
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<td>BUS 143 Personal Finance*</td>
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<td>BUS 159 Beginning Shorthand</td>
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<td>BUS 160 Office Machines</td>
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<tr>
<td>BUS 162 Office Procedures</td>
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<tr>
<td>BUS 166 Intermediate Shorthand</td>
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<tr>
<td>BUS 172 Beginning Typing</td>
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<tr>
<td>BUS 174 Intermediate Typing</td>
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<tr>
<td>BUS 238 Cost Accounting*</td>
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<tr>
<td>BF 713, 803, 813 Cooperative Work Experience**</td>
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</table>

*To qualify as a candidate for National Institute of Credit Fellow Award, students must complete required courses indicated in the 4 semesters plus one course from the Elective component of the curriculum designated by *.

**Enrollment only with consent of instructor.

### ASSOCIATE DEGREE PROGRAM — SAVINGS AND LOAN OPTION

#### Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec Hrs</th>
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<td>BUS 171 Introduction to Supervision</td>
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<td>COM 131 Applied Composition &amp; Speech</td>
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<tr>
<td>CS 175 Introduction to Computer Science</td>
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#### Spring Semester I

<table>
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<td>BUS 136 Principles of Management</td>
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<td>ECO 201 Principles of Economics</td>
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<td>BUS 231 Business Correspondence</td>
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<td>BF 105 Comparative Financial Institutions</td>
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#### Fall Semester II

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<td>BUS 237 Organizational Behavior</td>
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**Spring Semester II**

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<td>RE 130 Real Estate Practices &amp; Principles</td>
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<td>BF 115 Credit and Collection Principles</td>
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</tbody>
</table>

*12 Credit Hours Required for Associate Degree and to qualify for IFE Degree of Distinction
**Enrollment only with the consent of instructor

This program is designed to prepare the student for entry level employment as a carpenter in the Building Construction field. Specific training is provided in the use and care of hand tools and power equipment, scheduling, layout and construction of residential and light commercial type buildings, cabinet making, blueprint reading and cost estimating. Two options are available in this program: Residential Carpentry and Commercial Carpentry.

Some Building Trades courses are individualized. This allows the students to progress at their own pace in order to fully comprehend theory and develop the necessary skills. The individualized self-paced instruction also allows the student to take a course (module) without taking the complete course. Credit for prior training or experience may be granted.

Students may elect to receive a certificate or may apply the certificate courses required in this program toward an Associate in Applied Arts and Sciences Degree.

**CERTIFICATE PROGRAM**

A Certificate of Completion may be obtained in one or both of the options in Building Trades — Carpentry. In order to qualify for a certificate, the student must successfully complete the following core courses in addition to those listed for the specific option. The course may be taken in any order after consultation with the instructor.

<table>
<thead>
<tr>
<th>Core Courses (Required of all Students)</th>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR 400 Woodworking Tools &amp; Materials</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>CAR 410 Site Preparation and Foundations</td>
<td>120</td>
<td>4</td>
</tr>
<tr>
<td>or all of the following three courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR 411 Use of Builders Level &amp; Rod</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>CAR 412 Batter Boards</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>CAR 413 Foundation Forming</td>
<td>60</td>
<td>2</td>
</tr>
</tbody>
</table>
CAR 420 Interior Trim 150 5
or all of the following four courses:
CAR 421 Paneling 60 2
CAR 422 Dry Wall 30 1
CAR 423 Door Hanging 30 1
CAR 424 Window Installation 30 1
CAR 430 Construction Cost Estimating 30 1
BPR 177 Blueprint Reading 60 2
MTH 195 Technical Mathematics 48 3

RESIDENTIAL CARPENTRY CERTIFICATE OPTION

The residential carpentry option is designed to prepare the student for entry level employment as a carpenter in all phases of residential construction.

CAR 440 Rough Framing 120 4
or both of the following courses:
CAR 441 Floor and Sill Framing 60 2
CAR 442 Wall and Partition Framing 60 2
CAR 450 Roof Framing 150 5
or all of the following five courses:
CAR 451 Styles, Terminology & Methods 30 1
CAR 452 Gable Roofs 30 1
CAR 453 Hip Roofs 30 1
CAR 454 Mansard & Gambrel Roofs 30 1
CAR 455 Shed Roofs 30 1
CAR 460 Stair Building 90 3
or both of the following courses:
CAR 461 Stair Terminology and Calculations 30 1
CAR 462 Stair Construction 60 2
CAR 470 Exterior Trim and Finish 60 2
or both of the following courses:
CAR 471 Exterior Sheathing 30 1
CAR 472 Exterior Trim 30 1
CAR 480 Custom Cabinet Making 210 7
or all of the following three courses:
CAR 481 Design & Construction of Modern Cabinets 30 1
CAR 482 Cabinet Installation 60 2
CAR 483 Cabinet Construction 120 4
CAR 703 Work Experience 240 3
or 704 or 320 or 4

Minimum hours for Residential Certificate option 1308 40

COMMERCIAL CARPENTRY CERTIFICATE OPTION

The commercial carpentry option is designed to prepare the student for entry level employment as a carpenter in the construction industry related to light commercial buildings.

CAR 490 Commercial Building 330 11
or all of the following five courses:
CAR 491 Terminology 30 1
CAR 492 Vertical Piers & Columns 60 2
CAR 493 Horizontal Beam Forms 90 3
CAR 494 Fire Proof Encasement Forms 90 3
CAR 495 Stair Forms 60 2
CAR 703 Work Experience 240 3
or 704 or 320 or 4

Minimum hours for Commercial Certificate option 978 30
ASSOCIATE DEGREE PROGRAM

Students wishing to earn an Associate Applied Arts and Sciences Degree with a major in Residential Carpentry or Commercial Carpentry must complete all of the courses for the certificate program for that specific option in addition to the courses listed following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>SS 131 American Civilization</td>
<td>48</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives required to complete the Associate Degree from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131 Human Relations</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131 Bookkeeping</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>BUS 136 Principles of Management</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>BUS 153 Small Business Management</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>CAR 500 Building Construction Drafting</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>CAR 713 Work Experience</td>
<td>240</td>
<td>3</td>
</tr>
<tr>
<td>or 714</td>
<td>or 320</td>
<td>or 4</td>
</tr>
<tr>
<td>CAR 803 Work Experience</td>
<td>240</td>
<td>3</td>
</tr>
<tr>
<td>or 804</td>
<td>or 320</td>
<td>or 4</td>
</tr>
</tbody>
</table>

Minimum hours required for the Associate Degree 1902 61

*Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in Residential Carpentry or Commercial Carpentry must complete all of the courses for the certificate program for that specific option in addition to the courses listed above.

This program is designed to prepare the student for entry level employment as an electrician in the Building Trades field. Specific training is provided in electrical circuit calculations and measurements, residential and commercial wiring practices, machines and motor controls, blueprint reading, job layout and estimating and the electric code.

Some Building Trades' courses are completely individualized. This allows the students to progress at their own pace in order to fully comprehend theory and develop the necessary skills. The individualized self-paced instruction also allows the student to take a portion of a course (module) without taking the complete course. Credit for prior training or experience may be granted.

Students may elect to receive a certificate or may apply the certificate courses required in this program toward an Associate in Applied Arts and Sciences Degree.

CERTIFICATE PROGRAM

Completion of all of the courses listed below qualifies a student for a certificate in Building Trades — Electricity. The courses may be taken in any order after consultation with the instructor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE 470 Electrical Orientation</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>ELE 400 DC and AC Circuits</td>
<td>120</td>
<td>4</td>
</tr>
<tr>
<td>or all of the following three courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELE 401 DC Circuits &amp; Measurements</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>ELE 402 Basic AC Circuits</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>ELE 403 Three-Phase Circuits</td>
<td>30</td>
<td>1</td>
</tr>
</tbody>
</table>

Building Trades — Electricity

97
ELE410 Residential Wiring Practices 270 9
or all of the following four courses:
ELE 411 Residential Codes 30 1
ELE 412 General Wiring Practices 120 4
ELE 413 Appliance Circuits 90 3
ELE 414 Low Voltage Circuits 30 1
ELE420 Commercial Wiring Practices 240 8
or all of the following three courses:
ELE 421 Commercial Codes 30 1
ELE 422 Commercial Wiring 120 4
ELE 423 Power Circuits 90 3
ELE430 Electrical Machines 90 3
or all of the following three courses:
ELE 431 Motor Codes 30 1
ELE 432 DC and Single-Phase Machines 30 1
ELE 433 Three-Phase Motors 30 1
ELE440 Motor Controls 120 4
or all of the following four courses:
ELE 441 Control Circuit Diagrams 30 1
ELE 442 Magnetic Starting and Overload Protection 30 1
ELE 443 Jogging, Reversing and Sequencing 30 1
ELE 444 Solid State Controls 30 1
ELE450 Transformers 90 3
or all of the following courses:
ELE 451 Transformer Types and Testing 30 1
ELE 452 Distribution Transformers 60 2
ELE460 Job Layout and Estimating 120 4
or both of the following courses:
ELE 461 Residential Planning 60 2
ELE 462 Commercial Planning 60 2
MTH 195 Technical Mathematics 48 3
BPR 177 Blueprint Reading 60 2
ELE 703 Work Experience 240 3
or 704 or 320 or 4
Minimum hours for Certificate 1428 44

ASSOCIATE DEGREE PROGRAM

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in Building Trades — Electricity must complete all of the courses listed for the certificate program in addition to the courses listed below.

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>48 3</td>
</tr>
<tr>
<td>SS 131 American Civilization</td>
<td>48 3</td>
</tr>
</tbody>
</table>

Twelve credit hours of electives are required and shall be selected from the following list of courses.

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>48 3</td>
</tr>
<tr>
<td>PSY 131 Human Relations</td>
<td>48 3</td>
</tr>
<tr>
<td>PHY 131 Applied Physics</td>
<td>96 4</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>48 3</td>
</tr>
<tr>
<td>BUS 131 Bookkeeping</td>
<td>48 3</td>
</tr>
<tr>
<td>BUS 136 Principles of Management</td>
<td>48 3</td>
</tr>
<tr>
<td>BUS 153 Small Business Management</td>
<td>48 3</td>
</tr>
<tr>
<td>ELE 803 Work Experience</td>
<td>240 3</td>
</tr>
<tr>
<td>or 804</td>
<td>or 320 or 4</td>
</tr>
</tbody>
</table>

Minimum hours for Associate Degree 1716 62
This program is designed to prepare the student for entry level employment in the Diesel Mechanics industry. The student will develop the skills and knowledge necessary for the maintenance, repair and rebuilding of various diesel engines and diesel powered equipment.

Some diesel mechanics courses are completely individualized. This allows the students to progress at their own pace in order to fully comprehend theory and develop the necessary skills. The individualized, self-paced instruction also allows the student to take a portion of a course (module) without taking the complete course if some specific knowledge or skill is desired. Credit for prior experience or training may be given. Students may elect to receive a certificate or may apply the certificate courses required in this program toward an Associate in Applied Arts and Sciences Degree.

CERTIFICATE PROGRAM

Completion of the courses listed below qualifies a student for a certificate in Diesel Mechanics. The courses may be taken in any order desired after consultation with the instructor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DME 400</td>
<td>Diesel Engine Fundamentals and Component Repair</td>
<td>270</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>or all of the following five courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME 401</td>
<td>Rebuilding Cylinder Heads</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 402</td>
<td>Rebuilding Caterpillar Short Block</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 403</td>
<td>Rebuilding Cummins Short Block</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 404</td>
<td>Rebuilding Detroit Diesel Short Block</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 405</td>
<td>Air Induction, Cooling and Lubrication</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 410</td>
<td>Diesel Engine Fuel Systems</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 420</td>
<td>Diesel Engine Tune-up and Operations</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or all of the following three courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME 421</td>
<td>Caterpillar Engine Tune-up &amp; Operation</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 422</td>
<td>Cummins Engine Tune-up &amp; Operation</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 423</td>
<td>Detroit Diesel Engine Tune-up &amp; Operation</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 430</td>
<td>Diesel Engine Overhaul</td>
<td>180</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>or all of the following three courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME 431</td>
<td>Caterpillar Engine Rebuilding</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 432</td>
<td>Cummins Engine Rebuilding</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 433</td>
<td>Detroit Diesel Engine Rebuilding</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 440</td>
<td>Diesel Shop Practices</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or all of the following three courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME 441</td>
<td>Oxygen/Acetylene Welding</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 442</td>
<td>Arc Welding</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 443</td>
<td>Use and Operation of Power Tools</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 450</td>
<td>Vehicle Electrical Systems</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>or both of the following courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME 451</td>
<td>Electricity: The Theory &amp; Basic Circuity</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 452</td>
<td>Starting, Charging, Lighting, &amp; Accessory Circuits</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 460</td>
<td>Drive Train and Brakes</td>
<td>420</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>or all of the following nine courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DME 461</td>
<td>Five Speed Standard Transmission</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 462</td>
<td>Fuller R1-910 Standard Transmission</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 463</td>
<td>Differentials</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 464</td>
<td>Allison Automatic Transmission</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 465</td>
<td>Responder Automatic Transmission</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 466</td>
<td>Caterpillar Power Shift Transmission</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 467</td>
<td>Air Brake Systems</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>DME 468</td>
<td>Clutches</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>DME 469</td>
<td>Torque Converters</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>MTH 195</td>
<td>Technical Mathematics</td>
<td>48</td>
<td>3</td>
</tr>
</tbody>
</table>
ASSOCIATE DEGREE PROGRAM

Students wishing to earn an Associate in Applied Arts and Sciences Degree with a major in Diesel Mechanics must complete all of the courses listed for the certificate program in addition to the courses listed below.

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>48 3</td>
</tr>
<tr>
<td>PHY 131 Applied Physics</td>
<td>96 4</td>
</tr>
<tr>
<td>SS 131 American Civilization</td>
<td>48 3</td>
</tr>
</tbody>
</table>

Nine hours of electives are required and shall be selected from the following list of courses.

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>48 3</td>
</tr>
<tr>
<td>PSY 131 Human Relations</td>
<td>48 3</td>
</tr>
<tr>
<td>BPR 177 Blueprint Reading</td>
<td>64 2</td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>48 3</td>
</tr>
<tr>
<td>BUS 131 Bookkeeping I</td>
<td>48 3</td>
</tr>
<tr>
<td>BUS 136 Principles of Management</td>
<td>48 3</td>
</tr>
<tr>
<td>BUS 153 Small Business Management</td>
<td>48 3</td>
</tr>
<tr>
<td>DME 803 Work Experience or 804</td>
<td>240 3 or 320 4</td>
</tr>
</tbody>
</table>

Minimum hours for Associate Degree

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1814 64</td>
</tr>
</tbody>
</table>

Distribution Technology

The Distribution Technology program is designed to prepare students for entry or advancement in the career field of warehouse distribution. This program focuses on the basic business techniques and understanding of the principles and techniques relating to distribution, warehousing, pricing, merchandising, operations and management.

Successful completion of this program leads to the Associate of Applied Arts and Sciences Degree.

Fall Semester I

<table>
<thead>
<tr>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 130 Introduction to Distribution</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>MTH 130 Business Mathematics</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>BUS 136 Principles of Management</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>DT 131 Principles and Practices of Wholesale Marketing I</td>
<td>3 0 3</td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester I

<table>
<thead>
<tr>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 132 Principles and Practices of Wholesale Marketing II</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>ECO 201 Principles of Economics I</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>BUS 234 Business Law</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>3 0 3</td>
<td></td>
</tr>
<tr>
<td>Elective (Select from Recommended Electives)*</td>
<td>3 0 3</td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester II

<table>
<thead>
<tr>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT 231 Purchasing, Pricing, &amp; Inventory Management</td>
<td>3 0 3</td>
<td></td>
</tr>
</tbody>
</table>
BUS 201 Principles of Accounting I 3 0 3
BUS 237 Organizational Behavior 3 0 3
BUS 231 Business Correspondence 3 0 3
Elective (Select from Recommended Electives)* 3 0 3

Spring Semester II
DT 230 Materials Handling & Physical Distribution 3 0 3
DT 133 Transportation & Traffic Management 3 0 3
CS 175 Introduction to Computer Science 3 0 3
Elective (Select from Recommended Electives)* 6 0 6

*Recommended Electives
BUS 202 Principles of Accounting II 3 0 3
ECO 202 Principles of Economics II 3 0 3
BUS 206 Principles of Marketing 3 0 3
BUS 230 Salesmanship 3 0 3
BUS 209 Principles of Insurance 3 0 3
BUS 160 Office Machines 3 0 3
BUS 172 Beginning Typing 3 0 3
BUS 174 Intermediate Typing 2 0 2
Cooperative Work Experience 6-8 0 6-8

The Mid-Management program is a cooperative plan with members of the business community whereby the student attends college classes in business and related courses and concurrently works at a regular, paid, part-time job in a sponsoring business firm.

ASSOCIATE DEGREE PROGRAM
Courses required for an Associate in Applied Arts and Sciences Degree are listed below. The courses may be taken in any order provided that prerequisites have been met. The student should check descriptions in the catalog to determine which courses have prerequisites.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Cr Hrs</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester I</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 136 Principles of Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUS 150 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BUS 154 The Role of Supervision</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>or ENG 101 Composition &amp; Expository Reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>20</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Spring Semester I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BUS 151 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BUS 155 Personnel Management</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>or ENG 102 Composition &amp; Literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>20</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Fall Semester II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 201 Principles of Accounting</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>or BUS 131 Bookkeeping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 250 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BUS 254 Organizational Development</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
The Small Business Management program is designed to assist owners and managers of small business in developing the skills and techniques necessary for operation. The program is also designed for students who plan to become owners or operators of small businesses.

Successful completion of the program leads to the Associate in Applied Arts and Sciences Degree.

**ASSOCIATE DEGREE PROGRAM**

### Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 153 Small Business Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 150 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>BUS 154 Management Seminar: Role of Supervision</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 101 Composition &amp; Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 101 Introduction to Humanities</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td></td>
<td>11</td>
<td>20</td>
<td>15</td>
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</tbody>
</table>

### Spring Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 136 Principles of Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 151 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>BUS 155 Management Seminar: Personnel Management</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 202 Composition &amp; Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td></td>
<td>11</td>
<td>20</td>
<td>15</td>
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### Fall Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 157 Small Business Bookkeeping &amp; Accounting Practices</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 201 Principles of Accounting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or BUS 131 Bookkeeping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 250 Management Training</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>BUS 254 Management Seminar: Organizational Development</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>SS 131 American Civilization or HST 101 History of the United States</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
The program in real estate is designed to develop the fundamental skills, attitudes and experiences which enable the student to function in decision-making positions in the real estate profession. Successful completion of the program leads to the Associate in Applied Arts and Sciences degree.

ASSOCIATE DEGREE PROGRAM

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Description</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester I</strong></td>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or ENG 101 Composition &amp; Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MTH 130 Business Math</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RE 130 Real Estate Principle</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RE 131 Real Estate Finance</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring Semester I</strong></td>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or ENG 102 Composition &amp; Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RE 132 Real Estate Marketing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RE 135 Real Estate Appraisal</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RE 136 Real Estate Law</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or BUS 234 Business Law</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Elective (Psychology, Sociology</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or Human Development)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Fall Semester II</strong></td>
<td>ECO 201 Principles of Economics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RE 230 Real Estate Office Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RE 250 Real Estate Internship I</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>RE 254 Real Estate Seminar I</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Spring Semester II</strong></td>
<td>GVT 201 American Government</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS 201 Principles of Accounting</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RE 251 Real Estate Internship II</td>
<td>0</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>RE 255 Real Estate Seminar II</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Elective*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Office Occupations

There are three options in the area of Office Occupations including: General Office Careers, Secretarial Careers and Legal Secretary. The options in General Office Careers and Secretarial Careers offer Certificate and Associate in Applied Arts and Sciences degrees. The Legal Secretarial program is an Associate in Applied Arts and Sciences Degree program only.

General Office Careers Option

CERTIFICATE PROGRAM

A program designed for rapid entrance into the general office field. Courses required for a Certificate of Completion are listed below. The courses may be taken in any order provided that prerequisites have been met. Students should check the course descriptions in the catalog to determine which courses have prerequisites.

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr 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>MTH 130 Business Mathematics</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 160 Office Machines</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 172 Beginning Typing¹</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 174 Intermediate Typing</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>or ENG 101 Composition &amp; Expository Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester I</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 162 Office Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 165 Introduction to Word Processing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 174 Intermediate Typing¹</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>or BUS 273 Advanced Typing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 231 Business Correspondence</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 102 Composition &amp; Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 131 Bookkeeping I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 201 Principles of Accounting I</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Placed according to skill

ASSOCIATE DEGREE PROGRAM

Associate in Applied Arts and Sciences Degree — A program designed to enable advancement to responsible office positions.

This program is designed to train the student in office skills. Students completing the program will be qualified for positions as a clerk-typist, file clerk, receptionist, and word processing operator. This program does not include shorthand. There is a general orientation to the business world plus intensive training in typewriting, office machines, bookkeeping, and word processing. In the degree program, management principles and human relations skills are stressed which could lead to employment as a word processing supervisor or office manager.

To earn an Associate in Applied Arts and Sciences Degree, you must complete the courses listed in the Fall I and Spring I Semesters of the General Office Careers Certificate Program, plus the following:

<table>
<thead>
<tr>
<th>Fall Semester II</th>
<th>Lec Hrs</th>
<th>Lab Hrs</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 132 Bookkeeping II</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 202 Principles of Accounting II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 273 Advanced Typing</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>or Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 265 Word Processing Practices &amp; Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
BUS 234 Business Law 3 0 3
BUS 237 Organizational Behavior 3 0 3

Spring Semester II
BUS 275 Legal Secretarial Procedures 3 0 3
BUS 256 Office Management 3 0 3
HUM 101 Introduction to the Humanities 3 0 3
PSY 131 Human Relations 3 0 3
Elective 3 0 3
Elective 3 0 3

14

Suggested electives:
BUS 136, BUS 803, BUS 813, CS 175, ECO 201, PSY 105, SOC 101.

CERTIFICATE PROGRAM — SECRETARIAL CAREERS

Courses required for a Certificate of Completion are listed below. The courses may be taken in any order provided that prerequisites have been met. The student should check the course descriptions in the catalog to determine which courses have prerequisites. The program is designed for rapid entrance into the secretarial field.

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec</th>
<th>Lab</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 159 Beginning Shorthand^</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>or BUS 166 Intermediate Shorthand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 172 Beginning Typing^</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 174 Intermediate Typing</td>
<td>(1)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>BUS 160 Office Machines</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 131 Bookkeeping I</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or BUS 201 Principles of Accounting I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 105 Introduction to Business</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 101 Composition &amp; Expository Reading</td>
<td>3</td>
<td>0</td>
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Spring Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec</th>
<th>Lab</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 166 Intermediate Shorthand^</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>or BUS 266 Advanced Shorthand</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BUS 174 Intermediate Typing^</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>or BUS 273 Advanced Typing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 162 Office Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 231 Business Correspondence</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 165 Introduction to Word Processing</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>MTH 130 Business Mathematics</td>
<td>3</td>
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<tr>
<td></td>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^Placed according to skill

ASSOCIATE DEGREE PROGRAM

Associate in Applied Arts and Sciences Degree — A program designed for advancement to the executive secretarial level.

The purpose of this program is to prepare the student to become an alert and responsive secretary capable of performing the tasks required in the modern business office. Intensive training is provided in the basic secretarial skills such as shorthand, typewriting, and office machines. Emphasis is also placed on English, math, and human relations skills. The student may elect to receive a certificate only, or may apply the courses required in this major toward an Associate in Applied Arts and Sciences Degree.

To earn an Associate in Applied Arts and Sciences Degree, you must complete the courses listed in the Fall I and Spring I semesters of the Secretarial Careers Certificate Program, plus the following:
### Fall Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec</th>
<th>Lab</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 266 Advanced Shorthand</td>
<td>32</td>
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<tr>
<td>or Elective</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BUS 265 Word Processing Practices &amp; Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 273 Advanced Typing</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>or Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 175 Introduction to Computer Sciences</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 803 or BUS 804 Work Experience</td>
<td>3-4</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>or Elective</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### Spring Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec</th>
<th>Lab</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 275 Secretaryial Procedures</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>BUS 813 or BUS 814 Work Experience</td>
<td>3-4</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>or Elective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 102 Composition &amp; Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 101 Introduction to the Humanities</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>PSY 131 Human Relations</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Suggested electives:
- BUS 136, BUS 143, BUS 234, BUS 237, PSY 105, SPE 105, BUS 256.

### BACHELOR'S DEGREE PROGRAM

Students who wish to continue their education at a four-year college, should consult a counselor to plan a program of studies to assure that this goal is reached.

### Credit Given for CPS Rating

Credit toward the Associate in Applied Arts and Sciences Degree may be granted upon successful completion of all parts of the Certified Professional Secretary (CPS) Exam. The courses for which credit may be granted are:
- BUS 131 Bookkeeping I: 3
- BUS 159 Beginning Shorthand: 4
- BUS 162 Office Procedures: 3
- BUS 166 Intermediate Shorthand: 4
- BUS 172 Beginning Typewriting: 3
- BUS 174 Intermediate Typewriting: 2
- BUS 231 Business Correspondence: 3
- BUS 234 Business Law: 3
- PSY 131 Human Relations: 3

In order to receive credit, the applicant must:
1. Request direct notification be given to the Registrar of the College by the Institute for Certifying Secretaries that the applicant has passed all sections of the exam within the last 10 years;
2. Earned 12 hours credit for courses at North Lake before the advanced standing credit is posted on the applicant's record.

### ASSOCIATE DEGREE PROGRAM

A program designed to prepare students for professional entry into the legal secretarial field.

Courses required for an Associate in Applied Arts & Sciences Degree in this area include completion of all the following courses:

### Legal Secretary Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Lec</th>
<th>Lab</th>
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<tbody>
<tr>
<td>BUS 159 Beginning Shorthand</td>
<td>3</td>
<td>2</td>
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<tr>
<td>or BUS 166 Intermediate Shorthand</td>
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<tr>
<td>BUS 172 Beginning Typing</td>
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<td>BUS 160 Office Machines</td>
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<td>BUS 131 Bookkeeping I</td>
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<td>or BUS 201 Principles of Accounting I</td>
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<tr>
<td>BUS 105 Introduction to Business</td>
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<tr>
<td>COM 131 Applied Composition &amp; Speech</td>
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<tr>
<td>or ENG 101 Composition &amp; Expository Reading</td>
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**Spring Semester I**

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<th>Course</th>
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<tr>
<td>BUS 166 Intermediate Shorthand¹</td>
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<tr>
<td>or BUS 266 Advanced Shorthand</td>
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<tr>
<td>BUS 174 Intermediate Typing¹</td>
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<td>2</td>
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<tr>
<td>or BUS 273 Advanced Typing</td>
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<tr>
<td>BUS 162 Office Procedures</td>
<td>3</td>
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<td>BUS 231 Business Correspondence</td>
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<td>BUS 165 Introduction to Word Processing</td>
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<td>MTH 130 Business Mathematics</td>
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¹Placed according to skill

**Fall Semester II**

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<th>Course</th>
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<tr>
<td>BUS 266 Advanced Shorthand</td>
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<tr>
<td>BUS 265 Word Processing Practices &amp; Procedures</td>
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<tr>
<td>BUS 167 Legal Terminology &amp; Transcription</td>
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<tr>
<td>BUS 275 Secretarial Procedures</td>
<td>3</td>
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<tr>
<td>COM 132 Applied Composition &amp; Speech</td>
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<tr>
<td>or ENG 102 Composition &amp; Literature</td>
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<tr>
<td>BUS 273 Advanced Typing</td>
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<td>2</td>
<td>2</td>
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<tr>
<td>or Elective</td>
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<td><strong>Total</strong></td>
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**Spring Semester II**

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<th>Course</th>
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<tr>
<td>BUS 274 Legal Secretarial Procedures</td>
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<tr>
<td>CS 175 Introduction to Computer Sciences</td>
<td>3</td>
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<tr>
<td>HUM 101 Introduction to the Humanities</td>
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<tr>
<td>PYS 131 Human Relations</td>
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<td><strong>Total</strong></td>
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Suggested Electives
BUS 803, BUS 804, BUS 813, BUS 814, BUS 143, BUS 234, BUS 237, PSY 105, SPE 105, and BUS 256.
FACULTY AND ADMINISTRATION

Anders, Sue Stallings .................. Director
University of Texas Public Information
at Austin, B.A.; University
of Texas at Arlington, Study

Anderson, Ida .................. Counselor
Stephen F. Austin State
University, B.S., M.S.;
University of Northern
Colorado, Ed.D.

Anderson, B. T. .................. Chairman
Southwest Texas State Science/Math/Tech
Univ., B.S., M.S.

Bacon, Gary .................. Chairman
U.S. Military Academy, Business Division
B.S., Southern Methodist
Univ., M.B.A.

Baen, John .................. Real Estate
Texas A & M Univ., B.S., M.S.;
Texas A & M Univ., Study

Blackman, Lona .................. Physical Education
University of Texas at Austin, B.S.;
Southern Methodist Univ., M.S.

Blakenship, Patsy ............. Business
North Texas State
University, B.B.A., B.B.E.

Bolin, Bill .................. Air Conditioning/Refrigeration
East Texas State University, B.S., Voc. Ed.

Bolin, Rick .................. Associate Dean
University of Wisconsin-Continuing
Madison, B.B.A.; M.S.

Bounds, Glen I. .................. Vice President
Northwestern State University Instruction
of Louisiana, B.S.; East Texas
State University, M.S.;
East Texas State University, Study

Bowie, Walter H. .................. Vice President
Central State University, Student Services
Ohio, B.S.; Marshall University
of West Virginia, M.S.; Ohio
State University, Study

Briggs, Cathy .................. French
Oklahoma State University, B.S.;
University of Oklahoma, M.A.

Briggs, Olin .................. Journalism
Presbyterian College, B.A.;
University of South Carolina, M.A.;
University of Alabama, Ph.D.;
Post doctoral study: University of
Michigan, Texas Christian University,
University of Dallas; Southwestern
University

Brink, Lynn .................. Government
Southwestern University, B.A.;
North Texas State University, M.A.

Chapman, Paul ............... Director
Trinity University, B.A.; Financial Aid
Southern Methodist University,
M.Thr.

Cherry, Grady .................. English
Stephen F. Austin State University,
B.A., M.A.; Texas A & M University,
Ph.D.

Cole, Lynn .................. User Coordinator/Research
Florida Atlantic University, B.S.;
Florida State University, M.S.

Conklin, Lillian M. ............... English
University of Texas at El Paso,
B.A.; North Texas State University,
M.A.; Texas Christian University,
Study

Davis, Jeannie .................. Psychology
University of Texas at Austin,
B.A., M.A.

Dyer, Alice .................. Theatre
North Texas State University,
B.S.; Stephen F. Austin
State University, M.A.

Elms, Tommy N. Jr. ............ Diesel Mechanics

Evans, Nancy .................. Director, Student
East Texas State Development
University, B.S., M.S.

Faulkner, Finis L. ............ Diesel Mechanics
Eastfield, East Texas State
University, Prairie View A & M,
Diesel Technology

Gilchrist, Marilyn M. .......... Mathematics
Texas Tech University,
B.A., M.S.

Giles, Charles P. ............... Counselor
University of Arkansas, B.S.B.A.,
M.Ed., Ed.D

Hartzell, Pam .................. Reading
Kansas State College of
Pittsburg, B.A.; Southern
Methodist University, M.A.

Howard, Mike .................. Vice President
Lamar State University, Business
B.B.A.

Hughes, Martha .................. Chairperson
Texas Tech University, Social Science/B.A., M.A.
Physical Education

Hunter, Paul .................. Developmental Writing
University of Texas,
B.A.; University of
Florida, M.A.

Jacobs, Greg .................. Counselor
North Texas State University,
B.A., M.Ed.

Johnston, Neil ............... Athletic Director,
Ohio State University, Basketball Coach
B.S.; Temple University,
M.Ed.
Jones, Nancy.......................... English
East Texas State University,
B.A., M.A.; North Texas
State University, Ph.D.

Jones, Sue.............................. Psychology
Nebraska Wesleyan University,
B.A., Southern Methodist
University, M.A.

Kirchoff, Edwin E.......................... Mid-Management
University of Kansas,
B.A., M.A.

Knowles, Jim.............................. Physics
Texas Christian University,
B.S., Ph.D.

Kubiczek, Leonard......................... Geology
Lamar University, B.S.;
Southern Illinois University,
M.S.; University of Northern
Colorado, Ed.D.

Lassiter, Truman W........................ Diesel Mechanics
Study, University of Texas,
Kilgore Junior College, Texas
State Technical Institute,
University of Texas at Arlington,
Diesel Technology

Linker, Jerry............................ Associate Dean
East Texas State
University, B.S., M.S.;
University of Texas at
Austin, Ph.D.

Lipscomb, Brenda.......................... Counselor
Tennessee State University
Psychology, B.S., M.S.

Madewell, D'Ann.......................... English
Kansas State College of
Pittsburg, B.A.; North Texas
State University, M.A.

Magee, Paul.............................. Sociology
Harding College, M.A., B.A.;
Washington University,
Ph.D., M.A.

McAfee, A. C.............................. Electricity
Texas A & M University,
Eastfield Community College

McClung, Rachel......................... Art
University of Dallas, B.A., M.A.

McCool, Kenneth B........................ Mathematics
University of Texas at Arlington,
B.S.; North Texas State
University, M.S., Ph.D.

Miller, Louise Helton..................... Communications
Baylor University,
Testing Center

Moore, Jimmy P........................... Carpentry

Morman, Shelba Jean...................... Mathematics
Southern Arkansas University,
B.S.; Louisiana State University,
M.A.; University of Houston, Ed.D.

Newport, Donald L........................ President
Henry Ford Community College,
A.A.; University of Michigan,
A.B., M.A., Ph.D.

Osentowski, Francis....................... Music
Kearney State College, B.M.Ed.,
North Texas State University,
M.M.Ed., D.M.A. (Doctor of
Musical Arts, Composition)

Paroski, Mary P.......................... Philosophy
El Centro College, A.A.;
North Texas State University,
B.A., Southern Methodist
University, M.L.A.

Pearce, Nadine.......................... English
North Texas State University,
B.A., M.A.

Picchioni, Anthony....................... History
University of Texas at Arlington,
B.A., M.A. (History), North
Texas State University, M.Ed.
(Counseling)

Ray, Annetta N.......................... Accounting
Southern Methodist University,
B.B.A., M.B.A.

Reppond, Kent M.......................... Biology
Midwestern University, B.S.;
East Texas State University, M.S.

Rieman, Bonnie.......................... Director Admissions/
University of Wisconsin,
B.S.; State University of
‘New York, M.S.Ed.

Rike, Charlotte.......................... History
University of Arkansas, B.A., M.A.

Sconce, Evelyn......................... Business
George Mason College
of University of Virginia,
B.A.; University of Missouri, M.A.

Seeley, Robert.......................... Music
North Texas State University,
B.A., B. Music/Voice, M.M.E.

Southerland, Art......................... Division Chairman
East Texas State
University, B.M.Ed.,
Humanities
M.Ed.; Ph.D.

Thomas, Bruce.......................... Director
University of Texas at
Arlington, B.A.; North
Texas State University,
M.A., Study at North Texas
State University

Todes, Jay.............................. Mid-Management
University of Texas at Austin,
B.A., M.A.; University
of Houston, Ed.D.

Tully, Bettie B.......................... Counselor/
Our Lady of the
Human Development
Lake College, B.S.,
M.Ed.; East Texas State
University, D.Ed.

Vela, Joel E.............................. Director
Incarnate Word College,
Evening Programs
B.A.; Angelo State
University, M.A.; University
of Wyoming, Ed.D.

Weaver, Clifton A........................ Associate Dean
Southeastern State
University, B.S.;
Occupational Programs
North Texas State
University, M.Ed.

Wilson, Roger.......................... Carpentry
Texas State Technical
Institute, A.A., B.A.
ADVISORY COMMITTEES

Programs in the occupational fields are constantly monitored by experts from business and industry. These professionals are members of advisory committees selected by the college who provide vital information concerning manpower, skill requirements and future trends in their areas of expertise. Advisory committee members' on-line experience is extremely valuable to the college as it designs and develops programs to prepare students with current and relevant training in a chosen career field.

This cooperation between industry and education is directly beneficial to students in career programs at North Lake and is an important element in the level of quality of the college's career offerings.

<table>
<thead>
<tr>
<th>Accounting Advisory Committee Members</th>
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<tbody>
<tr>
<td>Mr. Charles J. Anthony</td>
</tr>
<tr>
<td>Arthur Anderson &amp; Company</td>
</tr>
<tr>
<td>Mr. Jim Bandy</td>
</tr>
<tr>
<td>Internal Revenue Service</td>
</tr>
<tr>
<td>Mr. James Beech</td>
</tr>
<tr>
<td>Certified Public Accountant</td>
</tr>
<tr>
<td>Mr. Bruce L. Bland</td>
</tr>
<tr>
<td>Texstar Plastic</td>
</tr>
<tr>
<td>Mr. Fred B. Bryan</td>
</tr>
<tr>
<td>Certified Public Accountant</td>
</tr>
<tr>
<td>Mr. Craig Carson</td>
</tr>
<tr>
<td>Microtron Industries, Inc.</td>
</tr>
<tr>
<td>Dr. Ron Walker</td>
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<tr>
<td>Southern Methodist University</td>
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<tr>
<td>Mr. Jack Stieber</td>
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<td>Alpha — Omega</td>
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<th>Air Conditioning/Refrigeration Advisory Committee Members</th>
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<tr>
<td>Mr. William E. Brister</td>
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<tr>
<td>C. B. Air-Conditioning Company</td>
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<tr>
<td>Mr. Helmut Delius</td>
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<tr>
<td>R. M. Carpenter Company, Inc.</td>
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<tr>
<td>Mr. Bill Edwards</td>
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<td>Texas Distributors</td>
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<tr>
<td>Mr. John Fagner</td>
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<td>United Distributors of Texas, Inc.</td>
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<tr>
<td>Mr. Larry Jones</td>
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<tr>
<td>Air World</td>
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<td>Mr. Luther Jones</td>
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<td>Carrier-Bock</td>
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<td>Mr. Don Miller</td>
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<tr>
<td>Dallas/Fort Worth Airport</td>
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<tr>
<td>Mr. Don Park</td>
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<tr>
<td>R. L. Turner High School</td>
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<tr>
<td>Mr. Jack Prince</td>
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<tr>
<td>Brandt Engineering Company</td>
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<tr>
<td>Mr. Roy Sayler</td>
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<td>Industrial &amp; Refrigeration Supply, Inc.</td>
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<td>Mr. Harry Spencer</td>
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<td>Spencer Air Conditioning &amp; Heating Company, Inc.</td>
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<th>Banking and Finance Advisory Committee Members</th>
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<tr>
<td>Mr. Ross Anderson</td>
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<tr>
<td>Murray Investment Company</td>
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<td>Mr. L. T. Baker</td>
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<td>Gifford-Hill Company</td>
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<tr>
<td>Ms. Elaine McAuliffe Busam</td>
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<td>First Texas Savings Association</td>
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<td>Mr. John H. Lomax</td>
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<td>Mr. Wayne Lowe</td>
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<td>Dallas Federal Savings</td>
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<td>Mr. Dennis McCuistion</td>
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<td>Commercial National Bank</td>
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<td>Mr. Todd Miller</td>
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<td>Richardson Savings and Loan</td>
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<td>Mr. Al Muirhead</td>
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<td>Republic National Bank</td>
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<td>Mr. Harry Robinson</td>
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<td>Federal Reserve Bank</td>
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<tr>
<td>Mr. Larry Seedig</td>
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<tr>
<td>Dallas Chapter, Institute of Financial Education</td>
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<tr>
<td>Ms. Judy Skelton</td>
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<tr>
<td>American Institute of Banking</td>
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<tr>
<td>Mr. Dick Young</td>
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<td>Triangle Pacific Corporation</td>
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<th>Carpentry Advisory Committee Members</th>
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<tr>
<td>Mr. Charles A. Barns</td>
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<tr>
<td>Barns Lumber &amp; Manufacturing Company</td>
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<tr>
<td>Mr. Donald L. Caruth</td>
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<tr>
<td>Caruth Management Consultants, Inc.</td>
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Mr. Jerry Cooper  
*Henry C. Beck Company*

Mrs. Doris Crocker  
*The Associated General Contractors of America*

Mr. George Emerson  
*Robert E. McKee, Inc.*

Mr. Jerry Hayes  
*J. A. H. Properties*

Mr. Billy McNatt  
*Carpenter’s Apprenticeship Program*

Mr. Vic Picheloup  
*Lloyd D. Blaylock General Contractor*

Mr. John Scheef  
*Austin Commercial, Inc.*

Mr. Louis Storey  
*R. L. Turner High School*

Mr. John Tanner  
*John Tanner Construction Company*

Mr. Richard Tucker  
*South Grand Prairie High School*

Mr. Gilbert Welch  
*Luther Hill & Associates, Inc.*

Mr. Jerry Wright  
*J. Wright Construction, Inc.*

**Diesel Mechanics Advisory Committee Members**

Mr. Paul Davis  
*Paul Davis Truck Sales*

Mr. Denver Easley  
*Red Ball Motor Freight*

Mr. Charles Hubbard  
*Cummins Sales & Service*

Mr. R. D. Jones  
*Dallas Transit Company*

Mr. William C. Kaphengst  
*General Motors*

Mr. Virgii Klenzendorf  
*Trinity Equipment Company*

Mr. George L. Peveto  
*International Harvester*

Mr. S. J. Rudd  
*International Harvester Company*

Mr. Joe Smith  
*Continental Trailways*

Mr. Dave Stitt  
*Stewart & Stevenson, Inc.*

Mr. Pete Thomas  
*C & H Transportation*

Mr. Lee White  
*Darr Equipment Company*

**Distribution Technology Advisory Committee Members**

Mr. Bob Burgess  
*Porter Burgess Company*

Mr. Les Georgis  
*Southland Corporation*

Mr. Cliff Hopper  
*Southwestern Drug Corporation*

Mr. Max Keller  
*General Motors*

Mr. John Leedom  
*Wholesale Electronic Supply*

Mr. A. S. Maurstad  
*Braniff Airlines*

Mr. Bob Patchen  
*Burgess Power Equipment*

Mr. Paul Rottman  
*Gardner Denver*

Mr. Malcolm Watson  
*Watson Electric Company*

Mr. Mike Workman  
*Cottingham Bearings*

**Electricity Advisory Committee Members**

Mr. Andy Anderson  
*Anderson Brothers Electric*

Mr. Joe Blair  
*Dallas/Fort Worth Airport*

Mr. Floyd Brown  
*Electric Control & Switch*

Mr. Larry Epperson  
*Fisk Electric Company of Dallas*

Mr. Tom Jones  
*Associated Independent Electrical Contractors of America*

Mr. Ed McKame  
*Rawlinson Electric Supply*

Mr. Ronnie P. O’Riley  
*Dallas Joint Electrical Apprenticeship and Training*

Mr. Don Owens  
*H. & O. Electric*

Mr. Richard Rogers  
*Hargrove Electric Company*

Mr. Butch Stosberg  
*Texas Power and Light Company*

Mr. Thomas G. Wilcoxen  
*International Brotherhood of Electrical Workers*

**Mid-Management Advisory Committee Members**

Mrs. Betty Beatty  
*Irving High School*
Mr. Jim Berling
Texas Stadium

Mr. Charles Bolen
Briggs-Weaver

Mr. Phil Bostley
Mary Kay Cosmetics

Mr. Glen Campbell
Recognition Equipment Corporation

Mr. Robert Davis
Otis Engineering

Mr. Leo Jackson
Irving Bank and Trust Company

Mr. R. C. McLaughlin
Dallas Wholesale Builder Supply

Mr. Hoie C. Meinzer
Motorola Communications and Electronics

Ms. Carol Schlipak
National Chemsearch, Inc.

Mr. Doyle Stewart
National Chemsearch, Inc.

Office Occupations
Advisory Committee Members

Miss Carol Appedole
International Business Machines

Mrs. Dorothy Carden
National Chemsearch, Inc.

Mrs. Orie Craig
American Bank

Mr. Lanny S. Day
Bureau of Health Care Financing, Medicare

Ms. Patricia J. Flynt
Dallas/Fort Worth Airport

Ms. Elaine Free
Irving Independent School District

Mr. Felix R. Garza
Civil Service Commission

Mr. Roland G. Howell
Texas Employment Agency

Ms. June Woodruff
Power, Ashley, and Kinkeade

Mrs. Melba Woodson
Nimitz High School

Real Estate
Advisory Committee Members

Mr. Jim Andrews
Jim Andrews, Inc., Realtors

Mr. Bud Archer
Blue Ribbon Homes

Mr. Jake Billingsley
Jake Billingsley and Company

Mr. Claude Chambers
Blue Ribbon Homes

Mr. Frank Foster
1st Guaranty Realty

Mr. Jim Leftwich
Dallas Title Company

Mr. Mike Leonard
Red Carpet Realtors

Mr. Billy Martin
Martin Real Estate

Ms. Audrey McFall
Artza Garza Realtors

Mr. Tommy Nunn
FHA Department — HUD

Ms. Mary Okerberg
Century 21 — Associated Brokers, Inc.

Ms. Mildred Shirley
Avery Real Estate

Ms. Margie Sweden
Red Carpet Realtors

Ms. Pat Watson
Pat Watson Realtors

Small Business Management
Advisory Committee Members

Mr. Henry Fisher
Small Business Administration

Mr. John Jackson
Malouf, Lynch and Jackson

Dean Robert Lynch
University of Dallas

Mr. Bill McIntire
Rimco

Mr. Avie Schonwald
Candy, Spector & Schonwald

Mr. John Tatum
Town North Bank

Mr. Jerry White
SMU School of Business

Ms. Sally Wolfe
Happy Happy Gifts

Mr. William M. Wood
Welsh, White and Wood
COLLEGE CODES

The College expects its students to conduct themselves in such a way as to reflect credit upon the institution they represent.

The Basic Expectation

A most important concept to be understood about the College's expectations of student conduct is the basic standard. Briefly stated, the basic standard of behavior would require a student (a) not to violate any municipal, state or federal laws, or (b) not to interfere with or disrupt the orderly educational processes of the College. A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens generally.

Identification Cards

I.D. cards will be distributed during registration. They will be needed for the following events and services: library usage, concerts, lectures, campus movies, use of student center facilities, voting in campus elections, tickets for campus and community events, and for identification in the Testing Center.

If lost, duplicate I.D. cards may be obtained by initiating a process in the Business Office. There will be a $4.00 charge for replacement. All I.D. cards are the property of the College and must be shown on request of a representative of the College.

Students are required to be in possession of their I.D. cards at all times and are prohibited from loaning their I.D. cards to any other person for any reason. Likewise, it is prohibited to use any other card except the one issued by the College. On withdrawal from school, a student must return his I.D. card to the Registrar's Office.

Authorized Use of Facilities

The College is a public facility entrusted to the Board of Trustees and college officials for the purpose of conducting the process of education. Activities which appear to be compatible with this purpose are approved by the College through a procedure maintained in the Student Development & Programs Office. Activities which appear to be incompatible or in opposition to the purpose of education are normally disapproved. It is imperative that a decision be made prior to an event in order to fulfill the trust of the public. No public facility can be turned over to the indiscriminate use of anyone for a platform or forum to promote random causes. Thus, reasonable controls are exercised by college officials of the use of facilities to ensure the maximum use of the College for the purpose for which it was intended. Therefore, anyone planning an activity at the College which requires space to handle two or more persons to conduct an activity must have prior approval. Application forms to reserve space must be acquired through the Evening Administration Office. This office also maintains a statement on procedures for reserving space.

Speech and Advocacy

Students have the right of free expression and advocacy; however, the time, place, and manner of exercising speech and advocacy, shall be regulated in such manner to ensure orderly conduct, noninterference with college functions or activities, and identification of sponsoring groups or individuals.

Meetings must be registered with the Student Development & Programs Office. An activity may be called a meeting when the following conditions prevail at that activity:

a. When two or more persons are sitting, standing, or lounging so as to hear or see a presentation or discussion of a person or group of persons.
b. When any special effort to recruit an audience has preceded the beginning of discussions or presentations.
c. When a person or group of persons appears to be conducting a systematic discussion or presentation on a definable topic.

Disruptive Activities

Any activity which interrupts the scheduled activities or processes of education may be classified as disruptive; thus, anyone who initiates in any way any gathering leading to disruptive activity will be violating college regulations and/or state law. (Sec. 4203 of the new Texas Penal Code, Revised 1971.)

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

a. Blocking or in any way interfering with access to any facility of the college.
b. Inciting others to violence and/or participating in violent behavior, i.e., assault; use or vulgar language spoken publicly or any form of behavior acted out for the purpose of inciting and influencing others.
c. Holding rallies, demonstrations, or any other form of public gathering without prior approval of the College.
d. Conducting any activity which causes college officials to be drawn off their scheduled duties to intervene, supervise, or observe the activities in the interest of maintaining order at the College.

Furthermore, the Vice President shall enforce the following college regulations in state law:

1. No person or group of persons acting in concert may willfully engage in disruptive activity or disrupt a lawful assembly on the campus or property of any private or public school or institution of higher education or public vocational and technical school or institute. Any person who is convicted the third time of violating this Act shall not thereafter be eligible to attend any public school or institution of higher education or public vocational and technical school or institute.

2. a. For the purpose of this Act, "disrupting activity" means
   (1) obstructing or restraining the passage of persons in an exit, entrance, or hallway of any building without the authorization of the administration of the School;
   (II) seizing control of any building or portion of a building for the purpose of interfering with any administrative, educational, research, or other authorized activity;
   (III) preventing or attempting to prevent by force or violence or the threat of force or violence any lawful assembly authorized by the school administration;
   (IV) disrupting by force or violence or the threat of force or violence a lawful assembly in progress;
   or
   (V) obstructing or restraining the passage of any person at the exit or entrance to said campus or property or preventing or attempting to prevent by force or violence or by threats thereof the ingress or egress of any person to or from said property or campus without the authorization of the administration of the School.

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

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

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

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

Drinking of Alcoholic Beverages

The College specifically forbids the drinking of or possession
of alcoholic beverages on its campus. Violation of this regulation leaves the student liable to disciplinary action by College authorities.

**Gambling**

State law expressly forbids gambling of any kind on State property. Gambling at the College will lead to disciplinary action.

**Hazing**

The College, as a matter of principle and because it is a violation of state law, is opposed to and will endeavor to prevent hazing activities which involve any of the following factors singly or in conjunction:

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

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

c. Activities which by their nature may reasonably be assumed to have a degrading effect upon the mental or moral attitude of the persons participating therein. Accordingly, any group or individual participating in hazing activities characterized by any or all of the above stated actions may expect disciplinary action to be taken against them.

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

**Conduct Expected of Students**

The succeeding regulations describe offenses for which disciplinary proceeding may be initiated, but the College expects from its students a higher standard of conduct than the minimum required to avoid discipline. The College expects all students to obey the law, to show respect for properly constituted authority, to perform contractual obligations, to maintain absolute integrity, to respect the law, to show respect for property and constitute authority, from its students a higher standard of conduct than the minimum required to avoid discipline.

The College function as an educational institution obligates to conduct himself in a manner compatible with the mission. Students are collectively responsible for any actions considered to be incompatible with the dignity of the college student and are, therefore, accordingly recommended that all groups be informed that both their officers and the group itself will be held singularly and collectively responsible for any actions considered to be unreasonable, immoral, and irresponsible with the policy limits detailed above. Individual activity falling in this category shall be handled on an individual basis and result in disciplinary action.

**Scholastic Dishonesty**

a. The Vice President may initiate disciplinary proceedings against a student accused of scholastic dishonesty.

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

c. "Cheating on a test" includes:

1. Copying from another student's test paper;

2. Using during a test, materials not authorized by the person giving the test;

3. Collaborating with another student during a test without authority;

4. Knowingly using, buying, selling, stealing, transporting or soliciting in whole or in part the contents of an unadministered test;

5. Substituting for another student, or permitting another student to substitute one's self to take a test; and

6. Bribing another person to obtain an unadministered test or information about an unadministered test.

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

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

**Financial Transactions with the College**

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

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

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

d. The Vice President may initiate disciplinary proceedings against a student who has allegedly violated subsection a. or b. of this section.

**Certain Other Offenses**

The Vice President may initiate disciplinary proceedings against a student who:

1. Conducts himself in a manner that significantly interferes with College teaching, research, administration, disciplinary procedures or other College activities, including its public service functions, or of other authorized activities on College premises;

2. Damages, defaces or destroys College property or property of a member of the College community or campus visitor;

3. Knowingly gives false information in response to requests from the College;

4. Engages in hazing, as defined by state law and College regulations;

5. Forges, alters or misuses College documents, records, or I.D. cards;

6. Violates College policies or regulations concerning parking, registration of student organizations, use of College facilities, or the time, place and manner of public expression;

7. Fails to comply with directions of College officials acting in the performance of their duties;

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

9. Illegally possesses, uses, sells, or purchases drugs, narcotics, hallucinogens, or alcoholic beverages on or off campus;

10. Commits any act which is classified as an indictable offense under either state or federal law.

**STUDENTS WILL BE PLACED ON DISCIPLINARY PROBATION FOR ENGAGING IN ACTIVITIES SUCH AS THE FOLLOWING:**

1. Being intoxicated

2. Misuse of I.D. card

3. Creating a disturbance in or on campus facilities

4. Gambling

**STUDENTS WILL BE PLACED ON DISCIPLINARY SUSPENSION FOR ENGAGING IN ACTIVITIES SUCH AS THE FOLLOWING:**

1. Having intoxicating beverages in any College facilities.

2. Destroying State property or student's personal property.

3. Giving false information in response to requests from the College.

4. Instigating a disturbance or riot.

5. Stealing

6. Possession, use, sale, or purchase of illegal drugs on or off campus.

7. Any attempt at bodily harm. This includes taking an overdose of pills or any other act where emergency medical attention is required.

**ANY ACT WHICH IS CLASSIFIED AS A MISDEMEANOR OR FELONY UNDER STATE OR FEDERAL LAW WILL BE SUBJECT TO DISCIPLINARY ACTION.**

The extreme form of disciplinary action is "EXPULSION" or permanent severance from the College. Because of the serious nature of discipline and conduct standards at North Lake College, all students are strongly advised to read the following STUDENT DISCIPLINE AND CONDUCT CODE.
STUDENT DISCIPLINE AND CONDUCT CODE

Chapter 1-100
General Provisions

Sec. 101. Purpose

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

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

Sec. 102. Application

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

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

Sec. 103. Definitions

In this code, unless the context requires a different meaning:

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

(2) "Dean" means the Vice President of Instruction & Student Development or the Vice President of Instruction & Community Development, his delegate(s) or his representatives;

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

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

(5) "President" means the President of the College;

(6) "Student" means a person enrolled at the College or a person accepted for admission to the College;

(7) all Vice Presidents, associate deans, assistant deans, directors, and division chairmen of the College for the purposes of this handbook shall be called "Administrators";

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

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

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

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

(12) "minor violation" means one which can result in any disciplinary action from the College or denial of degree.

Chapter 2-200
Initiation of Disciplinary Proceedings and Administrative Disposition

Sec. 201. Investigation

(a) When the Dean's Office receives information that a student has allegedly violated a Board rule, College regulation, or administrative rule, the Dean or his delegate shall investigate the alleged violation. After completing the preliminary investigation, the Dean may:

(1) dismiss the allegation as unfounded, or

(2) summon the student for a conference for a determination of the severity of the allegations and, after conferring with the student, either dismiss the allegation or

(a) proceed administratively under Section 203 if it is determined that the alleged violation is a minor violation and if the facts are not in dispute;

(b) proceed administratively under Section 204 if it is determined that the alleged violation is a major violation, or

(c) prepare a complaint based on the allegation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.

(b) The President may take immediate interim disciplinary action, suspend the right of a student to be present on the campus and to attend classes, or otherwise alter the status of a student for violation of a Board rule, College regulation, or administrative rule, when in the opinion of such official the interest of the College would best be served by such action.

(c) No person shall search a student's personal possession for the purpose of enforcing this code unless the individual's prior permission has been obtained. Searches by law enforcement officers of such possessions shall be only as authorized by law.

Sec. 202. Summoning Student

(a) A student may be summoned to appear in connection with an alleged violation by sending him a letter by certified mail, return receipt requested, addressed to the student at his address appearing in the Registrar's Office record. It is the student's responsibility to immediately notify the Registrar's Office of any change of address.

(b) The letter shall direct the student to appear at a specified time and place not less than three class days after the date of the letter. The letter shall also describe briefly the alleged violation and shall state the Dean's intention to handle the allegation as a minor or as a major violation.

(c) The Dean may place on disciplinary probation a student who fails without good cause to comply with a letter of summons, or the Dean may proceed against the student under Section 203 and 204.

Sec. 203. Administrative Minor Violation

(a) When the facts are not in dispute, the Dean may administratively dispose of any violation that he determines is a minor violation.

(b) In administratively disposing of a minor violation, the Dean may impose any disciplinary action authorized by Section 501 (A) 1, 2, 3, 4, 5, 6, 7, or 8.

(c) At a conference with a student in connection with an alleged minor violation the Dean shall advise the student of his rights.

(d) The Dean shall prepare an accurate, written summary of each administrative disposition of a minor violation and forward a copy to the student, to the parents or guardian of an unmarried student under 18 years of age, to the Director of Student Development & Programs, and to the Dean of Campus Security.

(e) A student may refuse administrative disposition of his alleged minor violation and on refusal is entitled to a hearing under Chapter 300. If a student accepts administrative disposition, he shall sign a statement that he waives the nature of the charges, his right to a hearing or to waive the same, the penalty imposed, and his waiver of the right to appeal.

Sec. 204. Administrative Disposition of a Major Violation

(a) The Dean may administratively dispose of any violation that he determines is a major violation, if

(1) it is in the best interest of the College and the student concerned; and

(2) The student concerned consents in writing to administrative disposition.

(b) At a conference with a student in connection with an alleged major violation the Dean shall advise the student of his rights.
(C) A student may refuse administrative disposition of his alleged major violation and on refusal is entitled to a hearing under Chapter 300. If a student accepts administrative disposition, he must sign a statement that he understands the violation charges, his right to a hearing, or to waive the same, the penalty imposed, and his waiver of the right to appeal.

(D) In administratively disposing of a major violation the Dean may impose any disciplinary action authorized under Section 301 (A).

(E) The Dean shall prepare an accurate, written summary of each administrative disposition of a major violation and forward a copy to the student, to the parents or guardian of an unarmed student under 18 years of age, to the Director of Student Development & Programs, and to the Director of Campus Security.

Chapter 3-300
Hearing

Sec. 301. Student Discipline Committee

(A) When a student refuses administrative disposition of either a major or a minor violation, he is entitled to a hearing before the Student Discipline Committee. This request must be made in writing on or before the third day following the administrative disposition authorized under Sec. 203 and Sec. 204. The committee shall be composed of any three administrative officers of the College. The committee shall be appointed by the President for each hearing on a rotating basis or on a basis of availability.

(B) The Student Discipline Committee shall elect a chairman from the three appointed members. The chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedures, but a majority of the committee members may override the chairman's ruling. All members of the committee are eligible to vote in the hearing.

(C) The Dean shall set the date, time, and place for the hearing and notify the student defendant of the date, time, and place. He shall also summon witnesses and require the production of documentary and other evidence.

(D) The Dean shall represent the College before the Student Discipline Committee and present evidence to support any allegations of violations of Board policy, College regulation, or administrative rules. The Dean may be assisted by legal counsel when in the opinion of the Dean the best interests of the student or the College would be served by such assistance.

Sec. 302. Notice

(A) The Dean shall notify the student concerned by letter of the date, time, and place for the hearing. The letter shall specify a hearing date not less than three (3) days nor more than ten (10) class days shall the date of the letter, if the student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian.

(B) The Dean may for good cause postpone the hearing so as to afford the student a reasonable opportunity to present a defense. The Dean shall set the new hearing date and notify the student defendant of the date, time, and place.

(C) The Student Discipline Committee may hold a hearing at any time if:

(1) the student has actual notice of the date, time, and place of the hearing; and

(2) the President, or his designated representative in his absence, states in writing to the Dean that, because of extraordinary circumstances the requirements of subsection (A) above are inappropriate.

(D) The notice under (A) above shall:

(1) specify whether the charge or charges are considered major or minor violations;

(2) direct the student to appear before the committee on the date and at the time and place specified;

(3) advise the student of his rights:

(a) to a private hearing;

(b) to appear alone or with legal counsel (if charges have been evaluated as a major violation);

(c) to have his parents or legal guardian present at the hearing;

(d) to know the identity of each witness who will testify against him;

(e) to summon witnesses, require the production of documentary and other evidence possessed by the College and offer evidence and argue in his own behalf;

(f) to have a stenographer present at the hearing to make a stenographic transcript of the hearing, at the student's expense, but the student is not permitted to record the hearing by electronic means;

(g) to appeal to the Faculty-Student Board of Review with the limits established by Sec. 401 (A);

(4) contain a copy of the complaint;

(E) The Dean may suspend a student who fails without good cause to comply with a letter sent under this section, or at his discretion, the Dean may proceed with the hearing in the student's absence.

Sec. 303. Preliminary Matters

(A) Charges arising out of a single transaction or occurrence, against one or more students, may be heard together or, either at the option of the committee or upon request by one of the students-in-interest, separate hearings may be held.

(B) At least three class days before the hearing date, the student concerned shall furnish the committee chairman with:

(1) the name of each witness he wants summoned and other evidence possessed by the College which he wants produced;

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

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

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

(C) When the hearing is set under Section 302 (C), or for other good cause determined by the committee chairman, the student concerned is entitled to furnish the information described in Section 303 (B) at any time before the hearing begins.

Sec. 304. Procedure

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

(1) representatives of the student members of Campus Commissions;

(2) a staff member of the student newspaper;

(3) representatives of the Faculty Association;

(4) student's legal counsel;

(5) members of the student's immediate family.

(B) The committee shall proceed generally as follows during the hearing:

(1) The Dean reads the complaint;

(2) the student is informed of his rights under Section 302;

(3) the Dean presents the College's case;

(4) the student presents his defense;

(5) the Dean and the student present rebuttal evidence and argument;

(6) the committee will determine an appropriate penalty;

(7) the committee, through the Dean, acting in behalf of the committee, informs the student of the decision as to the penalty, if any;

(8) the committee shall state in writing each finding of a violation of a Board rule, College regulation, or administrative rule, and the penalty determined, Each member of the committee will determine an appropriate penalty:

(7) the committee, through the Dean, acting in behalf of the committee, informs the student of the decision as to the penalty, if any;

(8) the committee shall state in writing each finding of a violation of a Board rule, College regulation, or administrative rule, and the penalty determined. Each committee member concurring in the finding and penalty shall sign the statement. The committee may include in the statement its reasons for the finding and penalty.
Sec. 402. Faculty-Student Board of Review

Appeal

Chapter 4-400

Appeal

Sec. 401. Right to Appeal to Faculty-Student Board of Review

(A) In those cases in which the disciplinary penalty imposed was authorized under Section 501 (A) 5, 7, 8, 9, 10, or 11, the student may appeal the decision of the Student Discipline Committee, or the decision of the President in an interim action under Section 201 (B) to the Faculty-Student Board of Review. Disciplinary actions taken under Section 501 (A) 1, 2, 3, 4, or 5 cannot be appealed beyond the Student Discipline Committee. A student appeals by giving written notice to the Dean on or before the third class day after the day the decision or action is announced. The notice is informal, but shall contain the student's name, the date of the decision or action, the name of his legal counsel, if any, and a simple request for appeal.

(B) Notice of appeal timely given under Section 401 (A) suspends the imposition of penalty until the appeal is finally decided, but interim action may be taken as authorized under Section 201 (B).

Sec. 402. Faculty-Student Board of Review

(A) The President shall appoint boards of review to hear appeals under this chapter. Each such board shall have three faculty representatives and two students appointed by the President and alphabetical rotation for available members of the review panel.

(B) The review panel has twenty-five members.

1. Fifteen representatives from the Faculty recommended by the President of the Faculty Association and appointed by the President of the College for three year staggered terms.

2. Ten students from the total student body recommended by the student members of the Campus Commissions and appointed by the President of the College for one-year terms. Students nominated must have an overall C average on all college work attempted at the time of the nomination and must not have a discipline case pending.

(C) The President shall instruct the Faculty-Student Board of Review members on student disciplinary policies, rules, and hearing procedures as soon as practicable after the members are appointed.

Sec. 403. Consideration of Appeal

(A) The Faculty-Student Board of Review shall consider each appeal made under Section 401 on the Student Discipline Committee and for good cause shown, original evidence and newly discovered evidence may be presented.

(B) At the student appellant's timely request, the President shall appoint an ad hoc Board of Review under the provisions of Section 402 (A); and notify the student appellant and Dean in writing of the time, date, and place of the hearing as determined by the President.

(C) The President will designate at least two members of the ad hoc Board of Review to serve as Chairman.

(D) Appellate hearings will follow the same procedure as described in Section 304 (A) and (B).

(E) The ad hoc Board of Review will hear oral argument and receive written briefs from the student appellant and Dean or their representatives.

(F) The Board of Review after considering the appeal may:

1. Affirm the Student Discipline Committee's decision.

2. Increase the penalty determined or otherwise modify the decision of the Student Discipline Committee.

3. Dismiss the complaint.

4. Modify or set the penalty.

5. Reduce the penalty determined or otherwise modify the decision of the Student Discipline Committee.

6. Require the Student Discipline Committee's decision to be modified or set.

7. Select one of the members of the disciplinary panel to serve as Chairman.

8. Requiring the President to instruct the Faculty-Student Board of Review members on student disciplinary policies, rules, and hearing procedures as soon as practicable after the members are appointed.

9. The ad hoc Board of Review may not increase a penalty assessed by the Student Discipline Committee.

Sec. 404. Petition for Administrative Review

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

(B) A petition for review is informal but shall contain, in addition to the information required by Section 401 (A), notice of appeal, the date of the ad hoc Board of Review's action on the student's appeal and his reason for disagreeing with the Board's action. A student shall file his petition with the President on or before the third class day after the day the ad hoc Board of Review announces its action on the appeal. If the President rejects the petition, and the student appellate wishes to petition the Chancellor, he shall file the petition with the Chancellor, or on before the third class day after the President rejects the petition in writing. If the Chancellor rejects the petition, the student appellate wishes to petition the Board of Trustees, he shall file the petition with the Chairman of the Board on or before the third day after the day of the Chancellor rejects the petition in writing.

(C) The President, the Chancellor, and the Board of Trustees in their review may take any action that the Student Discipline Committee is authorized to take by Section 304 (B) 6. They may receive written briefs and hear oral argument during their review.

Sec. 501. Authorized Disciplinary Penalties

(A) The Dean, under Section 203 and 204, or the Student Discipline Committee, under Section 304, or the Faculty-Student Board of Review, under Section 403, may impose one or more of the following penalties for violation of a Board rule, College regulation, or
administrative rule:

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

The following definitions apply to the penalties provided in Section 501 (A):

(1) Admonition is a reprimand from the Dean to the student on whom it is imposed.
(2) Warning probation indicates that further violations of regulations will result in more disciplinary action. Warning probation may be imposed for any length of time up to one calendar year, and the student shall be automatically removed from probation when the imposed period expires.
(3) Disciplinary Probation indicates that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.
(4) Withholding of transcript or degree is imposed upon a student who fails to pay a debt owed the College or who has a disciplinary case pending final disposition. The penalty terminates on payment of the debt or final disposition of the case.
(5) Bar against readmission is imposed on a student who has left the College or enforced withdrawal for disciplinary reasons.
(6) Restitution is reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
(7) Suspension of rights and privileges is an elastic penalty which may impose limitations or restrictions to fit the particular case.
(8) Suspension of eligibility for official athletic and non-athletic extracurricular activities prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization, taking part in a registered student organization’s activities, or attending its meetings or functions, and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year.
(9) Denial of degree may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time to and including permanent denial.
(10) Suspension from the College prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization, from entering the College campus except in response to an official summons, and from registering, either for credit or for non-credit, for scholastic work at or through the College.
(11) Expulsion is permanent severance from the College.

THIS POLICY APPLIES UNIFORMLY TO ALL OF THE COLLEGES OF THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT. IN THE EVENT ANY PORTION OF THE POLICY CONFLICTS WITH THE STATE LAW OF TEXAS, THE STATE LAW SHALL BE FOLLOWED.
PARKING AND TRAFFIC CODE

Reserved Parking Areas

These reserved areas are designated by signs; all other parking areas are open and are non-reserved.

1. Handicapped persons, College visitors
2. Motorcycles

Tow Away Areas (7 AM-10 PM)

1. Handicapped persons area
2. Fire Lanes
3. Parking or driving on campus in areas other than those designated for vehicular traffic
4. Parking in "No Parking" zone
5. Parking on courtyards

General Information

1. College parking areas are regulated by state, municipal and campus statutes. College campus officers are commissioned to cite violators.
2. All vehicles which park on the campus of the College must bear a parking decal emblem. The parking decal may be secured from the College Security Division (Room K-301) or during fall and spring registration periods. No fee is charged for the decal.
3. Placement of decal emblem:
   a. Cars: Lower left corner or rear bumper.
   b. Motorcycles, Motor Bikes, etc.: Gas tank.
4. Campus Speed Limits:
   a. 10 M.P.H. in parking areas.
   b. 20 M.P.H. elsewhere on campus.
   *Unless otherwise posted.
5. All handicapped parking must be authorized by Health Center Nurse (A-422) and handicapped decal displayed on vehicle prior to parking in handicapped reserved area.

Campus Parking and Driving Regulations

1. The Colleges, acting by and through their Board of Trustees, are authorized by state law to promulgate, adopt and enforce campus parking and driving regulations. Campus campus officers are commissioned police officers, and as such, all traffic and criminal violations are within their jurisdiction.
2. The College has authority for the issuance and use of suitable vehicle identification insignia as permits to park and drive on campus. Permits may be suspended for the violation of campus parking and driving regulations.
3. The College campus officers have the authority to issue and use traffic tickets and summons of type now used by the Texas Highway Patrol. It is the general policy to issue these tickets for violations by visitors and persons holding no College permit. (Senate Bill 162, Section 6). These tickets are returnable to the Justice of the Peace Court in which the College is located. Furthermore the campus officers are authorized to issue campus tickets which are returnable to the Department of Safety & Security at the Business Office.
4. Under the direction of the College President, the Department of Safety & Security shall post proper traffic and parking signs.
5. Each student shall file an application for a parking permit with the Security Office upon forms prescribed by the College.
6. These traffic regulations apply not only to automobiles but to motor bikes, motorcycles and ordinary bicycles.

Procedures

1. All motor vehicles must be parked in the parking lots between the parking lines. Parking in all other areas, such as campus drives, curb areas, courtyards, and loading zones, will be charged.
2. Citations may be issued for:
   a. Speeding (the campus speed limit is 20 M.P.H., except where posted)
   b. Reckless driving
   c. Double parking
   d. Driving wrong way in one-way lane
   e. Parking in "No Parking" lane
   f. Improper parking (parts of car outside the limits of a parking space)
   g. Parking in wrong area (for example, handicapped or "No Parking" areas)
   h. Parking trailers or boats on campus
   i. Parking or driving on campus in areas other than those designated for vehicular traffic
   j. Violations of all state statutes regulating vehicular traffic
   k. Failure to display parking permit
   l. Collision with another vehicle or any sign or immovable object
3. A citation is notice that a student's parking permit has been suspended. The service charge to reinstate the parking and driving permit must be paid at the Business Office. Failure to pay the service charge will result in the impoundment of a vehicle that is parked on campus and whose decal has been suspended.
4. A person who receives a campus citation shall have the right within ten days to appeal in writing to the Safety Committee, accompanied by whatever reason the person feels that the citation should not have been issued. The Safety Committee will be composed of at least three members appointed by College President. No Security Officer shall serve on this committee. Contact the Business Office regarding the committee's meeting times and dates.
5. It if becomes necessary to remove an improperly parked vehicle, an independent wrecker operator may be called. The owner of the vehicle will be charged the wrecker fee in addition to the service charge for reinstatement of driving and parking privileges.
6. Visitors to campus are also required to follow College regulations.
7. The service charge for reinstatement of the parking and driving permit will be $2.00 per citation.
8. Four citations per car during an academic year will result in a permanent suspension of parking and driving permit for the balance of that academic year. A new total commences on August 1 of each year.
9. The College is not responsible for the theft of vehicles on campus or their contents.
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