Collin County Community College (CCCC) is an equal opportunity institution and does not discriminate on the basis of race, color, religion, sex, national origin, age, handicap or veteran status.

Collin County Community College complies with The Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226). For more information, contact the Dean of Students or the Director of Human Resources.

The programs, policies, statements, fees and/or courses contained herein are subject to continuous review and evaluation. CCCC reserves the right to make changes at any time without notice. This publication is intended for information only.

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Accreditation Status

CCCC is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. Accreditation and approval ensure transferability of semester hour credits from CCCC to four-year colleges and universities.

Postmaster
Send address changes to:
CCCC
Public Information Office
2200 W. University Drive
P.O. Box 8001
McKinney, TX 75069-8001
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Deadline for Graduation/Certificate Application for Fall 1991
Registration
Late Registration & Add/Drop
First Day of Class
Labor Day Holiday (Campuses Closed)
Official Census Date
Telephone Express Registration (TEX) Spring 1992
Last Day to Withdraw
Thanksgiving Holiday (Campuses Closed)
Deadline for Graduation/Certificate Application for Spring 1992
Last Day to Drop a Developmental Course
Final Exams/Textbook Buyback
Last Day of Semester
Winter Break (Campuses Closed)

S P R I N G  1 9 9 2

Registration
Late Registration & Add/Drop
First Day of Class
Official Census Date
No Classes — Staff Development Day
Spring Break (Student Holiday)
Spring Break (Campuses Closed)
Telephone Express Registration (TEX) Spring 1992
Last Day to Withdraw
Spring Holiday (Campuses Closed)
Last Day to Drop a Developmental Course
Deadline for Graduation/Certificate Application for Summer 1992
Final Exams/Textbook Buyback
Last Day of Semester
Commencement
Telephone Express Registration (TEX) Summer 1992

SUMMER 1992

Memorial Day Holiday (Campuses Closed)
May 25
Registration for Summer 1992 May 27–28
Summer I and III:
First Day of Class June 1
Late Registration June 1
Summer I: Official Census Date June 4
Summer II: Official Census Date June 8
Summer I: Last Day to With Summer II: Last Day to Drop a Developmental Course
Summer I: Final
Exams/Textbook Buyback July 2
Summer I: Last Day of Semester July 2
Independence Day Holiday July 3–5
(Campuses Closed)
Summer II: First Day of Class July 6
Summer II: Late Registration July 6
Summer II: Official Census Date July 9
Summer III: Last Day To Withdraw July 20
Summer II: Last Day to Drop a Developmental Course July 22
Summer II: Last Day To Withdraw August 3
Deadline for Graduation/Certificate Application for Fall 1992 August 3
Summer III: Last Day to Drop a Developmental Course August 4
Summer II & III: Final Exams/Textbook Buyback August 5–6
Summer II & III: Last Day of Semester August 6
Fall 1992 Classes Begin August 24
# CCCC Office and Phone Directory

## Central Campus

<table>
<thead>
<tr>
<th>Office</th>
<th>Phone Number</th>
<th>Room Number</th>
<th>Phone Number</th>
<th>Room Number</th>
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<tbody>
<tr>
<td>General Information</td>
<td>548-6790</td>
<td>A111</td>
<td>881-5790</td>
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<td>Administrative Services</td>
<td>548-6620</td>
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<td>Admissions</td>
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<tr>
<td>Advising</td>
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<tr>
<td>Arts and Humanities Division</td>
<td>548-6830</td>
<td>A206</td>
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<tr>
<td>Articulation and Transfer</td>
<td>548-6770</td>
<td>A108</td>
<td>881-5758</td>
<td>G103</td>
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<tr>
<td>Bookstore</td>
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<tr>
<td>Business and Engineering Division</td>
<td>548-6830</td>
<td>A206</td>
<td>881-5831</td>
<td>F135</td>
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<tr>
<td>Business Office/Bursar</td>
<td>548-6630</td>
<td>B209</td>
<td>881-5630</td>
<td>G136</td>
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<td>Cooperative Work Experience</td>
<td>548-6735</td>
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<td>Dean of Students</td>
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<td>Developmental Education</td>
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<td>8336</td>
<td>881-5720</td>
<td>K104</td>
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<tr>
<td>Director of Testing</td>
<td>548-6850</td>
<td>A354</td>
<td>881-5739</td>
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<td>Enterprise</td>
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<tr>
<td>Financial Aid</td>
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<td>Future Shop</td>
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<td>B216</td>
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<td>K218</td>
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<td>Human Resources</td>
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<td>A129</td>
<td>881-5611</td>
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<tr>
<td>Institutional Advancement</td>
<td>548-6860</td>
<td>B105</td>
<td>881-5860</td>
<td>D151</td>
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<tr>
<td>Library/Learning Resources Center</td>
<td>548-6690</td>
<td>A116</td>
<td>881-5690</td>
<td>K020</td>
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<tr>
<td>Physical Plant/Security</td>
<td>548-6600</td>
<td>A130</td>
<td>881-5600</td>
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<tr>
<td>President's Office</td>
<td>548-6610</td>
<td>A114</td>
<td>881-5610</td>
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<tr>
<td>Registrar's Office</td>
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<tr>
<td>Science and Health Division</td>
<td>548-6880</td>
<td>A305</td>
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<td>Social Science Division</td>
<td>548-6880</td>
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<td>Project SPARK</td>
<td>548-6827</td>
<td>B331</td>
<td>881-5627</td>
<td>G239</td>
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<td>Student Activities</td>
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<td>B251</td>
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<td>F129</td>
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<td>Student Development Center</td>
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<tr>
<td>Testing Center</td>
<td>548-6849</td>
<td>B342</td>
<td>881-5922</td>
<td>S232</td>
</tr>
<tr>
<td>Vice President of Instruction</td>
<td>548-6800</td>
<td>B302</td>
<td>881-5801</td>
<td>G228</td>
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<tr>
<td>For offices not listed</td>
<td>548-6790</td>
<td></td>
<td>881-5790</td>
<td></td>
</tr>
</tbody>
</table>

## Spring Creek Campus

<table>
<thead>
<tr>
<th>Office</th>
<th>Phone Number</th>
<th>Room Number</th>
<th>Phone Number</th>
<th>Room Number</th>
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</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

Note: Areas without a room number on either Central Campus or Spring Creek Campus have offices only on the campus listed.
Collin County Community College is governed by a nine-member Board of Trustees. Members are elected at-large by Collin County residents for six-year terms of office. Trustees are responsible for setting policy for the college and serve without compensation. Regular board meetings are held each month and are open to the public.

**MISSION STATEMENT**

Collin County Community College affirms as its mission the commitment to provide, within the resources available, educational programs and services which meet individual and community needs. The college is committed to lifelong learning through quality and excellence in all educational areas including transfer/parallel, vocational, technical, developmental, a general education core and continuing education.

**PHILOSOPHY AND PURPOSE**

The educational philosophy of CCCC is that programs and services of the college should be available to all citizens who can benefit from them. Within this context, the purpose of the college is to create an environment which will help people to: live creative, humane, ethical, healthy and sensitive lives; recognize, accept and
encourage differences in personal, racial, ethnic and cultural backgrounds; relate to others openly and responsibly; generate the motivation to continue learning throughout life; develop an appreciation for all occupations, recognizing that dignity and honor come from a task well done rather than from the status of a vocation; acquire the skills necessary for earning a living in a way that will promote the general welfare; and prepare for a beneficial use of leisure time.

**GOALS**
Collin County Community College exists to serve the educational needs of the citizens of Collin County and has established the following goals to meet these needs.

**Transfer/Parallel Education**
Students completing the two-year associate of arts or associate of science degrees are able to transfer with junior class standing to any college or university in the United States.

**Vocational/Technical Education**
Students completing vocational/technical programs qualify for employment in their fields of study.

**Developmental Education**
Students are provided with opportunities for developing the necessary skills to successfully complete pre-baccalaureate/technical or general studies programs.

**General Education Core**
Through a broad spectrum of disciplines, students are exposed to concepts, values and philosophies which lead to the development of skills that are essential to functioning effectively in a democratic society.

**Continuing Education**

**Student Development Programs**
These programs provide professional assistance to all students in establishing and accomplishing educational and career goals.

**Co-Curricular**
Experiences are provided which complement instructional programs of the college.

**Economic and Community Development**
The college is to be a major contributor to the economic growth and development of Collin County.
Day and evening classes are offered at both Central Campus and Spring Creek Campus as well as locations throughout the county. The college does not limit the use of its facilities to students only. All Collin County residents are encouraged to use the facilities at both campuses.

In 1990, the college purchased 125 acres of land in the southwest part of Collin County for the construction of a third campus site.

Collin County Community College District was authorized on April 6, 1985. The first classes were offered in fall 1985 in high schools throughout the county. Central Campus opened its doors to students in January 1986. Central Campus is a 130,000 square floor facility located on 100 acres of land near the intersection of Highways 75 and 380 in McKinney, Texas.

In the fall of 1988, construction of a second campus was completed. Spring Creek Campus, located at the juncture of East Spring Creek Parkway and Jupiter Road in east Plano, is a 380,000 square foot facility housing a physical education complex, a conference center, a theatre, a student lounge, a Learning Resources Center and a food service area, in addition to classroom, laboratory and office space.
ADMISSIONS AND REGISTRATION

ADMISSIONS PROCEDURES
Collin County Community College operates under an "open door" admissions policy. Students who are 18 years of age or older with a high school diploma or equivalent are eligible for admission. Other students may be admitted under special admission requirements that follow. The college reserves the right to guide the placement of students through assessment, which may include interviews and a review of past academic achievement.

Registration options are enhanced and delays may be avoided by completing all admissions requirements in advance of registration.

NEW STUDENT ADMISSIONS
New students should submit to the Admissions Office:
1. An application for admissions. This application may be submitted prior to, or at the time of, registration.
2. An official transcript from their most recent high school or college attended or a copy of their GED scores. Students applying for and/or receiving financial aid or veterans benefits will be required to submit a complete record of all academic work including high school transcripts. Degree-seeking students will be required to submit all official transcripts.
3. While not required, the college recommends that all students who have completed the SAT and/or ACT submit their scores.

Admission to the college does not guarantee admission to a specific program of study. Programs in nursing, emergency medical technology, respiratory care and child development have additional admissions criteria. Contact the division office for information on program requirements or restrictions.

Returning Student Admissions
Former CCCC students who have not been enrolled during the preceding two regular (16-week) semesters will need to reapply for admission. Documentation of Texas residency must be submitted to the Admissions Office along with an application for admission/readmission and an official transcript from any colleges or universities attended since their last enrollment at CCCC.

For more information on residency requirements see page 12.

TRANSFER STUDENT ADMISSIONS
Transfer students who are in good standing academically and otherwise at the last institution of higher education they attended are eligible for admission. They are required to submit an application for admission and their most recent college transcript.

Students who transfer to CCCC from other institutions of higher education will be awarded credit according to the conditions that

1. Credit must have been earned at a regionally-accredited institution of higher education. Foreign transcripts will not be evaluated at CCCC.
2. An official transcript from all institutions of higher education attended by the student must be on file at CCCC.
3. Official course descriptions from the catalog under which the student attended are required for evaluation.
4. Credit for courses equivalent to those listed in the catalog will be accepted if the courses are required on the student's degree plan for graduation. Other credits may be accepted in lieu of elective courses depending on the student's program of study.
5. An official evaluation may be requested at any time, but it will be completed and recorded on the CCCC transcript only after the student has completed six semester hours at CCCC.
6. Official evaluations are conducted by the degree plan specialist. Final
approval rests with the division dean.

7. Grades of "D" are accepted from other institutions; however, a cumulative GPA of 2.0 is required for graduation. Grades of "F" and 'T' do not transfer.

8. Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of a student's DD214 (Honorable Discharge).

9. While there is no limit on the number of hours that can be transferred into CCCC from other institutions, there is an 18 credit hour residency requirement to earn an associate degree from CCCC. Students obtaining certificates containing 18 hours or less must complete course work in residence at CCCC. Petitions to transfer credits into certificate programs containing 18 hours or less may be made to the division dean through the degree plan specialist.

10. Time limits and minimum grade requirements may be imposed for transfer work into select programs. Contact the program coordinator or division dean for details.

**Concurrent Enrollment/Project First Step**

High school students may, with permission of the appropriate high school officials, hold concurrent enrollment in high school and college courses.

Requirements for admission include a letter from the high school counselor or principal, a high school transcript of work completed to date, assessment, orientation, parental permission and an admissions interview. Permission of the professor may be required. All students within the age of compulsory secondary attendance who are admitted must maintain at least a 2.0 GPA and will be enrolled provisionally on a semester by semester basis. Credit will be awarded according to state, local and institutional policies in effect at the time of enrollment. Contact the Admissions Office for more information.

**International Student Admissions/F-1, F-2 Visas**

All international students must provide the Admissions Office with the following:

1. application for admission;
2. official international TOEFL score of 525 or above;
3. a completed statement of financial support (available from the Admissions Office);
4. official transcripts/school records from all previous colleges or universities; and
5. a valid visa or passport upon arrival.

International students who do not qualify under these requirements will be advised by the Admissions Office as to how they might acquire the necessary qualifications. It is recommended that all admissions materials be received 30 days prior to regular registration to ensure issuance of the I-20.

**Students on Probation or Suspension**

Students on academic or disciplinary probation or suspension from another institution of higher education may be barred from admission or admitted on a provisional basis. Official transcripts and personal interviews are required. The college reserves the right to limit the number of hours or specify courses in which a student on probation or suspension may enroll. Probationary status may be imposed while at CCCC. See the section on satisfactory progress or contact the Admissions Office for additional information.

**Texas Academic Skills Program (TASP)**

In an effort to ensure that all students pursuing higher education have certain basic skills, the State of Texas has enacted legislation which requires the following:

The Texas State Education Code requires that all students “...who enter
public institutions of higher education in the fall of 1989 and thereafter be tested for reading, writing and mathematics skills.” This includes all “full-time and part-time freshmen enrolled in a certificate or degree program...” “any non-degree students prior to the accumulation of nine or more (college) credit hours or the equivalent,” and “any transfer student with fewer than 60 semester credit hours or the equivalent who has not previously taken the tests.” All students seeking teacher certification will be required to take TASP. Performance on TASP will not be used as a condition for admission. A student may not “enroll in any upper division course, (the) completion of which would give the student 60 or more semester credit hours, or the equivalent until the student’s test results meet or exceed the minimum standards in all test scores.” Other assessment procedures may be used in exceptional cases to allow a student to enroll in upper division courses...in cases where test results do not meet minimum standards.” (Texas Education Code, Sec. 51.306). Until TASP is successfully completed, continuous remediation is mandated. New students will be required to furnish the college with necessary proof regarding TASP status. The test fee will be paid by the student. Note: For specific current information about TASP and CCCC’s testing, contact the director of testing. Please note that, in addition to the state test, the college requires new students to be assessed in reading, writing and math for diagnostic and course placement purposes. Developmental classes and tutorial assistance are available for students who need or want this support. Transfer students must provide documentation of TASP status. Documentation may be in the form of TASP score reports, official transcripts or other score reports.

Students requesting exemption from TASP should provide the Admissions Office with one of the following documenting the receipt of at least three hours of college-level credit earned prior to September 1, 1989: • an official transcript (college, university, trade, foreign university, or military); • an official score report (AP, CLEP, DANTES).

Orientation
Orientation provides an overview of the policies, procedures, services and student activities at CCCC. Although all first-time college students are strongly encouraged to attend orientation upon completion of local assessments and prior to their initial enrollment, transfer and returning students not familiar with the college would also benefit from the program. The orientation schedule can be found in the class schedule.

Registration Procedures
Telephone Express Registration (TEX)
Telephone Express registration provides students with an early opportunity to enroll for courses for the subsequent semester. This process is designed for students who have completed admissions and assessment requirements and met with their assigned academic advisor. Telephone Express registration enables students to have earlier course selection, deferred tuition payment and more comprehensive advisement. See the class schedule for a listing of dates, times and complete instructions on telephone registration.

Regular Registration
Regular registration is scheduled prior to the beginning of classes with admissions, assessment and advising services available at that time. Comprehensive admissions, assessment and advising programs are more easily obtained prior to regular registration and students are encouraged to complete these processes early. Tuition and fees are due at the time of registration. See the class schedule for a listing of regular registration times and locations.

Late Registration
Students who wish to register late should do so within the published late registration schedule. A late registration fee will be assessed. This fee is not assessed to students who have completed registration during Telephone Express
or regular registration periods and are making schedule changes.

**Residence Requirements**

The State of Texas requires that each student sign an affidavit certifying legal residency prior to enrollment.

Texas law defines an in-state resident as an individual residing in Texas who has been gainfully employed (or dependent upon a parent who has been gainfully employed) in Texas for the 12 months preceding registration.

- An in-county student is an individual who is a resident of Texas and who resides in Collin County at the time of registration.
- An out-of-county student is a resident of Texas who resides outside of Collin County at the time of registration.
- An out-of-state student is an individual who has not resided in Texas for 12 months preceding registration or whose permanent resident card is less than 12 months old. Most students on temporarily visas will also be classified as non-residents for tuition purposes.

The responsibility for registering under the proper residency classification is that of the student and any question concerning the student's right to classification as a resident of Collin County must be clarified prior to the time of enrollment at CCCC. If a student's residency status changes, it is the responsibility of the student to notify the proper college officials; failure to do so may result in disciplinary action. Students should promptly report address changes to the Registrar's Office.

Listed below are acceptable documents to support residency:

- Students who are dependent on a parent's residence status must also submit the top portion of the Federal Income Tax form for the current and preceding years.

Out-of-state or county tuition may be waived for individuals owning real property in Collin County. A copy of the deed is required. Property owners on most types of temporarily visas are not eligible for the Ad Valorem waiver.

**Tuition and Fees**

Tuition is based on residency and the number of credit hours for which a student enrolls. Following is a schedule of tuition and fees by residency classification.

- Laboratorly Fee: $0 to $25 per lab
- Audit Fee: $25 per course plus tuition and any other applicable fees
- Late Registration Fee: $10
- Transcript Fee: $2 per official copy
- Returned Check Fee: $10

**Documents to Support Residency**

- Permanent Texas driver's license (at least one year old)
- Texas high school transcript (if enrolled within the last 12 months)
- Texas college or university transcript (if enrolled within the last 12 months)
- Letter of employment on company letterhead (verifying one year of employment)
- Texas voter's registration card (at least one year old)
- Lease agreement covering the past 12 months
- Collin County property tax statements
- Other third party documentation
<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>In-County ($18 per credit hour)</th>
<th>Out-of-County ($25 per credit hour)</th>
<th>Out-of-State ($60 per credit hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>*$25</td>
<td>*$25</td>
<td>**$200</td>
</tr>
<tr>
<td>2</td>
<td>$36</td>
<td>$50</td>
<td>**$200</td>
</tr>
<tr>
<td>3</td>
<td>$54</td>
<td>$75</td>
<td>**$200</td>
</tr>
<tr>
<td>4</td>
<td>$72</td>
<td>$100</td>
<td>$240</td>
</tr>
<tr>
<td>5</td>
<td>$90</td>
<td>$125</td>
<td>$300</td>
</tr>
<tr>
<td>6</td>
<td>$108</td>
<td>$150</td>
<td>$360</td>
</tr>
<tr>
<td>7</td>
<td>$126</td>
<td>$175</td>
<td>$420</td>
</tr>
<tr>
<td>8</td>
<td>$144</td>
<td>$200</td>
<td>$480</td>
</tr>
<tr>
<td>9</td>
<td>$162</td>
<td>$225</td>
<td>$540</td>
</tr>
<tr>
<td>10</td>
<td>$180</td>
<td>$250</td>
<td>$600</td>
</tr>
<tr>
<td>11</td>
<td>$198</td>
<td>$215</td>
<td>$660</td>
</tr>
<tr>
<td>12</td>
<td>$216</td>
<td>$300</td>
<td>$720</td>
</tr>
<tr>
<td>13</td>
<td>$234</td>
<td>$325</td>
<td>$780</td>
</tr>
<tr>
<td>14</td>
<td>$252</td>
<td>$350</td>
<td>$840</td>
</tr>
<tr>
<td>15</td>
<td>$270</td>
<td>$375</td>
<td>$900</td>
</tr>
<tr>
<td>16</td>
<td>$288</td>
<td>$400</td>
<td>$960</td>
</tr>
<tr>
<td>17</td>
<td>$306</td>
<td>$425</td>
<td>$1,020</td>
</tr>
<tr>
<td>18</td>
<td>$324</td>
<td>$450</td>
<td>$1,080</td>
</tr>
<tr>
<td>19</td>
<td>$342</td>
<td>$475</td>
<td>$1,140</td>
</tr>
<tr>
<td>20</td>
<td>$360</td>
<td>$500</td>
<td>$1,200</td>
</tr>
<tr>
<td>21</td>
<td>$378</td>
<td>$525</td>
<td>$1,260</td>
</tr>
</tbody>
</table>

Note: Lab fees are additional costs. Additional fees may be assessed as new programs are developed. These fees will be kept to a practical minimum.

* a minimum fee of $25 per semester will be charged
** a minimum fee of $200 per semester will be charged

2. Students must have their cash register receipt to receive a refund.
3. Students should not write in new books until they are certain they have the correct books. New books which have been written in will not receive a full refund.
4. Books in shrink wrap (plastic or vinyl packaging) must be returned in the original package. Books cannot be accepted if the shrink wrap has been removed.
5. Defective books should be returned at once and will be replaced at no charge.

Textbook Shortages—The bookstore makes every effort to have the required textbooks by registration week. For various reasons, there may be shortages: out-of-print or out-of-stock by the publisher, unexpected increases in enrollment, late placement of orders by the faculty, missing shipments and human error. Every attempt is made to minimize these problems.

Textbook Buyback—Books are bought back at the end of each semester during final exam dates. Faculty decide whether a textbook will be used again. If a faculty member has informed the bookstore that he/she will require a particular book for the upcoming semester, the bookstore will pay the student 50 percent of the original price of the book, regardless of whether the book was purchased new or used. Workbooks and study guides cannot be bought back. Unless a faculty member tells the bookstore that he/she will use that title again, the bookstore must assume that it will not be used. Books falling into this category can be bought from students only at used wholesale prices. Old editions have no value and cannot be resold even to wholesalers. Some courses at CCCC are not taught every semester and students may wish to sell their books when that course is offered again, provided the faculty member requires the same books.

Check Cashing—Checks may be cashed in the amount of $10 with or without a purchase. MasterCard, VISA, checks and cash are accepted as payment.
ACADEMIC POLICIES

ADDING OR DROPPING COURSES

Any change in a student’s schedule of classes is accomplished by completing the official add-drop form obtained from the Registrar’s Office or by calling Telephone Express. Students already registered may add classes prior to the fourth class hour. Adding and dropping must be student-initiated. Students may drop a class with a grade of “W” through the end of the 11th class week during a regular term and through the end of the 4th week in a short summer term.

In fall 1991 students enrolled in developmental classes have until the last regular class date to drop a developmental course unless they are required by TASP to be in remediation. Effective spring 1992, students will have until the end of the 14th week during regular semesters and the end of the 4th week during summer sessions to drop a developmental course unless they are required by TASP to be in remediation. Students who are enrolled in a developmental course for TASP purposes may not drop their only developmental course unless they completely withdraw from the college. For information, see the dean of developmental education.

International students and students receiving financial aid or veteran’s assistance should see the appropriate college official before dropping or withdrawing. See “Withdrawal from College,” page 21, for exact procedures.

Students should contact their professors prior to initiating a drop or withdrawal. A student who discontinues class attendance and does not officially drop the course will receive a performance grade for the course.

AUDIT

Registration to audit a course will be permitted as long as a credit student is not displaced from the class as a result of the audit. An audit student is subject to the usual registration process. Tuition and fees for an audit are included in the tuition and fees schedule. Since state reimbursement is not received for audits, a special audit fee will be assessed in addition to tuition.

Students who are auditing classes will not receive grades or credit for the course, but the transcript will indicate that the course was audited. Students who are auditing classes will not be required to take tests; however, participation in regular class activities is expected. Enrolled students may not change to audit status following the certification date for that course.

CLASS ATTENDANCE

Regular classroom attendance is expected of all students. Class attendance requirements are determined by professors, therefore, a student should ascertain each professor’s attendance policy during the first day of the class.

Students who receive Veterans Administration educational benefits must conform to attendance and academic standards as established by the Veterans Administration and college policy. Information concerning requirements for attendance, satisfactory progress, certification of benefits and all other questions affecting veteran students may be obtained from the director of financial aid/veterans affairs. It is the veteran student’s responsibility to determine and conform to college policies affecting veterans.

RELIGIOUS HOLIDAYS

In accordance with Section 51.911 of the Texas Education Code, CCCC will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time. Students will be required to file a written request with each professor within the first 15 days of the semester to qualify for an excused absence. A copy of the state rules and procedures regarding holy days and the form for notification of absence from each class under this provision are available from the Registrar’s Office.
**Grading System**

- **A** Excellent
  - 4 grade points per semester hour
- **B** Above Average
  - 3 grade points per semester hour
- **C** Average
  - 2 grade points per semester hour
- **D** Below Average
  - 1 grade point per semester hour
- **F** Failure
  - 0 grade points per semester hour; not computed toward cumulative GPA or cumulative hours.
- **W** Withdrawal
  - 0 grade points per semester hour; not computed toward cumulative GPA until it is replaced with a performance grade. (See “Incomplete Grades/Contracts” section.)
- **I** Incomplete
  - 0 grade points per semester hour; not computed toward cumulative GPA; is not computed in GPA but is computed in cumulative hours.
- **IP** In-Progress
  - 0 grade points per semester hour; student has completed 70 percent of the program but is not yet at competency level. Earned only in self-paced developmental courses; is not computed toward cumulative GPA. Student must complete the remaining work during the next consecutive long semester or receive an IP as the permanent grade.
- **TP** TASP Remediation In-Progress
  - 0 grade points per semester hour; is not computed toward cumulative GPA. Earned only in developmental self-paced courses.
- **AU** Audit
  - 0 grade points per semester hour; is not computed toward cumulative grade point or cumulative hours.
- **CR** Credit
  - 0 grade points per semester hour; is not computed in GPA but is computed in cumulative hours. Earned only when recording non-traditional credit.
- **Z** No grade reported by professor
  - 0 grade points per semester hour until it is replaced by a performance grade; is not computed in cumulative grade point nor cumulative hours.

At the completion of each term, the college will determine the student’s semester and cumulative grade point averages which will be recorded on a grade report to be received by the student. Grades earned in developmental education courses are not averaged into the cumulative GPA.

**Calculating Grade Point Average (GPA)**

Grade points represent the translation of letter grades into numerical values. The grades that have grade point values are:

- **A** 4.0 grade points for 1 credit
- **B** 3.0 grade points for 1 credit
- **C** 2.0 grade points for 1 credit
- **D** 1.0 grade points for 1 credit
- **F** 0.0 grade points for 1 credit

The cumulative GPA is the result of dividing the total of all quality grade points earned by the total number of quality hours/credits attempted (excluding “IP”s, “IP”s, “TP”s and developmental course work). An example of how to compute the grade point average is provided below.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 152</td>
<td>3</td>
<td>C</td>
<td>3 credits x 2 points = 6</td>
</tr>
<tr>
<td>BIOL 151</td>
<td>4</td>
<td>B</td>
<td>4 credits x 3 points =12</td>
</tr>
<tr>
<td>PSYC 151</td>
<td>3</td>
<td>F</td>
<td>3 credits x 0 points = 0</td>
</tr>
<tr>
<td>MATH 010*</td>
<td>3</td>
<td>A</td>
<td>1 credits x 4 points = 4</td>
</tr>
<tr>
<td>HPED 130</td>
<td>1</td>
<td>A</td>
<td>1 credit x 4 points = 4</td>
</tr>
</tbody>
</table>

Total = 22

**Quality points earned:** 22

**Quality hours attempted:** 11

\[ \frac{22}{11} = 2.0 \text{ GPA} \]

*Since no quality grade points or hours credit are given for I, P, or developmental courses, the credits for MATH 010 are not used in computing the GPA.

**High Academic Achievement**

All students who complete 12 or more quality semester hours during a regular term with a 3.5 GPA or above qualify for the Dean’s List.

All students who complete 12 or more quality semester hours during a regular term with a 4.0 GPA qualify for the President’s List.
**Graduation**

The college offers associate of arts, associate of science and associate of applied science degrees, and certificate programs. Students who plan to graduate from CCCC should file a degree plan with the degree plan specialist prior to the completion of 30 credit hours. Students may graduate under any of the college’s catalogs from the preceding five years as long as the student was enrolled under that catalog; however, students may benefit from graduating under the requirements of a recent catalog.

A student who completes specific course requirements for a degree or certificate with a minimum cumulative grade point average in the degree plan of 2.0 is a candidate for graduation. *Note: transfer credits used toward graduation will be calculated in the cumulative grade point average.*

Graduation honors will be awarded for students with the following cumulative grade point average in their degree plan. *Note: transfer credits used toward graduation will affect graduation honors.*

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>Summa cum laude</td>
</tr>
<tr>
<td>3.75 – 3.99</td>
<td>Magna cum laude</td>
</tr>
<tr>
<td>3.5 – 3.74</td>
<td>Cum laude</td>
</tr>
</tbody>
</table>

**Associate Degree**

Students may earn an associate of arts degree, an associate of science degree or an associate of applied science degree. See pages 38, 43 and 46 for specific degree plans. To graduate, students must complete a minimum of 18 credit hours at CCCC and satisfy all other degree requirements. Non-traditional credit will not meet this residency requirement. Candidates for an associate degree must submit an application for graduation and pay the assessed graduation fee no later than the deadline established for that semester. Students with less than six hours remaining toward completion of an associate degree may participate in graduation ceremonies provided they are pre-registered for the appropriate summer courses. Students planning to complete graduation requirements during a summer session and participate in graduation ceremonies must file for graduation and pay any necessary fees in the preceding spring semester.

**Certificate Program**

Students obtaining certificates containing 18 hours or less must complete course work in residence at CCCC. Petitions for transfer credits into certificate programs containing 18 hours or less may be made to the division dean through the degree plan specialist. Certificates will be awarded upon completion of program requirements. Fees are due prior to awarding the certificate. Students earning certificates may participate in commencement ceremonies.

**Incomplete Grades/Contracts**

Incomplete contracts must be agreed to and signed by the involved student, professor and appropriate division dean at the close of the term in order for a grade of “I” to be assigned. The contract must define the exact requirements the student is to fulfill in order to receive a performance grade. Incomplete contracts must be completed as specified in the contract, but no later than the end of the following 16-week term. The contract may state that if the work is not completed as specified, the grade will be changed to a performance grade based
on the quality and amount of work completed. Failure to remove an “I” as contracted will result in an “I” being placed on the permanent record.

**Non-Traditional College Credit (NTCC)**

Various credit options enable persons who have acquired knowledge and skills in non-traditional ways to demonstrate academic achievement. Credit may be given for college-level experience as demonstrated by acceptable test results regardless of the means by which the knowledge was acquired, except for college credit that has been previously granted. Students may also receive credit for some previous military training. Please note that a fee for test administration and transcript recording will be assessed. Without special permission from the vice president of instruction, not more than 18 hours of NTCC may be counted toward a degree.

For additional information regarding CLEP examinations, tests given by college professors, advanced placement tests, the Customized Articulation Program and armed forces credit, contact the director of testing.

**College Level Examination Program (CLEP)**

Most public supported colleges and universities have agreed to accept as transfer credits all CLEP credit granted by regionally accredited institutions using the criteria below. CLEP General Exams are not evaluated for credit at CCCC. Students planning to use CLEP credit to meet degree requirements at other institutions should check the requirements of the receiving institution. CCCC uses these criteria for CLEP subject exam evaluation:

a) CLEP credit shall be recorded on transcripts so as to be clearly recognized as credit earned by examination (CR) rather than through residency course work.

b) CLEP credits shall not be granted if they duplicate credits for courses already completed.

c) Credit is awarded for CLEP Subject Examination scores at or above the 70th percentile.

Official score reports should be sent to the director of testing.

d) A non-refundable fee will be charged for each CLEP examination.

**Credit by Exam (Tests Given by College Professors)**

Credit for some courses may be granted upon successful completion of a comprehensive examination over the content of the course. A non-refundable fee is charged for each course examination. Students must be currently enrolled at the college to receive credit by examination. Students may not request credit by examination in courses for which they are currently enrolled. Credit by examination may be attempted only once for any given course. The student must score at or above 70 percent to receive credit for the course.

**Advanced Placement Tests of the College Board (AP)**

Beginning freshmen who have received college-level training in secondary schools and who present scores of three, four or five on the appropriate Advanced Placement Examination will be granted, on request, placement and credit for comparable courses at the college following the completion of six semester hours at the college. For more information contact the director of testing.

**Customized Articulation Program (CAP)**

Through formalized contracts, CCCC and the Allen, Dallas, Denton, Lewisville, McKinney and Plano independent school districts have articulation agreements which allow students enrolled in designated high school vocational/technical programs to receive, under certain conditions, college credit for courses completed in high school. To participate students should obtain a recommendation from their high school teacher or other designated school official, send an official high school transcript to the CCCC Admissions Office and secure approval from the corresponding program coordinator at CCCC. Petitions for credit through articulation may be obtained from the high school counselor, the Admissions Office or the program coordinators at CCCC.
After receiving approval from the CCCC program coordinator to participate in CAP, students place the designated high school courses in escrow at CCCC and become eligible to receive college credit for those courses provided they:

1. meet all of the admission requirements for CCCC;
2. enroll at CCCC within one year after high school graduation;
3. complete at least six semester hours in the corresponding articulated program at CCCC, maintaining at least a “C” average in the articulated program; and
4. submit an acceptable portfolio and/or pass any required proficiency examinations specified in the program outline.

See the individual degree programs for more information on specific articulation agreements.

**Armed Forces Credit**

In addition to using credit previously earned at other institutions to achieve advanced placement at the college, students may also receive such standing by presenting evidence of having satisfactorily completed a program of military training for which equivalent college credit may be given in accordance with the American Council on Education Standards and Recommendations. Armed forces credit is evaluated by the degree plan specialist.

**Release of Information**

In compliance with the Family Educational Rights & Privacy Act of 1974, Federal Law 93-380, information classified as “directory information” may be released to the general public without the consent of the student. Directory information is defined as:

1. student name;
2. student address;
3. telephone listing;
4. date and place of birth;
5. major field(s) of study;
6. participation in officially recognized activities and sports;
7. weight and height of athletic team members;
8. dates of attendance;
9. most recent previous educational institution attended; and
10. degrees and awards received.

A student may request that directory information be withheld from the public by making a written request to the Registrar’s Office during the first 10 days of a fall or spring semester or during the first 4 days of a summer session. Such request will be valid until the first class day of the following fall semester. If no request is filed, information will be released upon inquiry. Directory information is the only part of a student’s record that may be released without the consent of the student. No transcript or inquiries concerning an academic record will be released without written consent of the student specifying the information to be released. See the CCCC Student Handbook for detailed information.

**Restricted Access to Records**

The following persons, agencies and organizations may have restricted access to student records without prior written consent of the student:

1. school officials and professors with a legitimate educational interest;
2. representatives of state, federal and local government when auditing and evaluating federal or state education programs;
3. financial aid officers to process a financial aid application or form;
4. governmental officials to which information is to be reported under state law;
5. accrediting organization for accrediting purposes;
6. appropriate persons in case of emergency, if such information is necessary to protect the health or safety of the student or others; and
7. organizations approved by the president or the president’s designee conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering protective tests, administering student aid programs, and improving instruction, if such studies are conducted in such a manner that will not permit the personal identification of students and their parents by persons other than
representatives of such organization.

Information will be destroyed when no longer needed for the purposes for which it was collected.

**Repeating Courses**

Courses that may be repeated for credit more than one time are specified in the course description. Otherwise, courses may be repeated for the purpose of improving grade point average (GPA) only one time without permission from the appropriate academic administrator. *Only the grade and credits earned in the most recent course repeated will be used in computing the grade point average and applied toward degree or program requirements.*

Grades of all courses taken will be recorded on the student’s transcript.

Veterans should consult the director of financial aid/veterans affairs before repeating any course.

**Satisfactory Progress**

In order to encourage students to make progress towards their goals, the college has established minimum standards for satisfactory academic progress. After completing 18 quality hours, full-time and part-time students must maintain a minimum 2.0 cumulative GPA to be in good standing. Quality hours refers to the number of college-level hours a student completes at CCCC, excluding developmental, non-traditional and transfer work. These quality hours are used in calculating a student’s CCCC GPA.

**Academic Warning**

Students with less than 18 quality hours at the college who have not earned a minimum 2.0 cumulative GPA will be placed on academic warning. Students on academic warning will receive written notification of their status each regular semester. Students on academic warning should seek advisement prior to continued enrollment; however, no registration restrictions will apply.

**Academic Probation**

Students accumulating 18 or more quality hours with less than a 2.0 cumulative GPA at the college will be placed on academic probation and notified in writing of their probationary status. Students on academic probation will be required to obtain the signature of their academic advisor on their advising registration ticket prior to registration. Students who have registered early and have been subsequently placed on academic probation should meet with their academic advisor prior to the end of the add/drop period.

**Continued Enrollment on Probation**

Students may enroll for classes while on academic probation as long as they earn a 2.0 or better grade point average for the current semester. Students on probation must see their academic advisor prior to registration and will not be eligible for the registration signature waiver option. Students who have registered early and have been subsequently placed on academic probation should meet with their academic advisor prior to the end of the add/drop period.

**Academic Suspension**

Students on probation who earn less than a 2.0 GPA for the semester will be placed on academic suspension. Students on suspension may not re-enroll for the next regular semester (fall or spring) following the semester in which they were placed on suspension.

Students who register early and are subsequently placed on suspension may be administratively withdrawn unless they petition for continued enrollment. Suspended students who petition and are granted permission to re-enroll may have restrictions on the number of hours and courses in which they may register. Conditions for readmission are established and administered by the Academic Progress Task Force.

**Second Suspension**

Students who are suspended for the second time may not re-enroll for one calendar year and are not eligible to petition for re-enrollment during that calendar year.

**Veteran Students**

Veteran students who make unsatisfactory academic progress will be reported to the Veterans Administration as being on probation at the end of the second consecutive semester when the cumulative GPA remains below 2.0. If a non-punitive grade is assigned to a veteran and is not converted to a punitive grade within a limited period of time, this will be reported to a VA Regional
Office within 30 days of issuance of the non-punitive grade, and benefits will be reduced accordingly. Students who fail to meet these academic standards of progress will jeopardize eligibility to receive financial aid and/or other benefits such as those from the Veterans Administration.

**STUDENT CLASSIFICATIONS**

**Freshman:** A student who has successfully completed fewer than 30 credit hours.

**Sophomore:** A student who has successfully completed 30 or more credit hours.

**Full-time:** A student enrolled for 12 credit hours or more in a regular semester or 6 credit hours or more in a summer session.

**Part-time:** A student enrolled for 11 credit hours or less in a regular semester or 5 credit hours or less in a summer session.

**STUDENT CODE OF CONDUCT**

Collin County Community College students are both citizens and members of the academic community. As citizens and students they enjoy the same freedom of speech, peaceful assembly and right of petition that other citizens enjoy. As members of the academic community, they are subject to the obligations which are theirs by virtue of this membership.

The college expects its students to conduct themselves in such a way as to reflect credit upon the institution they represent. There are two basic standards of behavior required of all students:

1. they shall adhere to college policies and municipal, state, county and federal laws; and
2. they shall not interfere with or disrupt the orderly educational processes of the college.

Students are entitled to only those immunities or privileges by law as enjoyed by other citizens. For more information, see the CCC Student Handbook or contact the Dean of Students’ Office.

**STUDENT LOAD**

A full-time student load is a minimum of 12 credit hours per regular semester. Students taking 11 credit hours or less per semester are classified as part-time students. Full-time status during the summer sessions or accelerated sessions may vary. For clarification, see “Student Classifications” or the registrar.

Students may, with special permission of the appropriate academic administrator, enroll for more than 18 credit hours during a regular term and seven hours in a summer session. Normally, permission will not be granted unless the student has a 3.0 cumulative grade point average and plans to carry no more than 21 hours during a regular term or 9 hours or less during a summer session.

**TRANSCRIPTS**

Students wanting a transcript of their work at Collin County Community College should contact the Registrar’s Office. Requests for official transcripts must be made in writing by the student to the registrar. A fee will be charged for each official transcript requested. (Grade reports will be mailed to students at the end of each term.)

**VETERANS’ CERTIFICATION**

Veterans wishing to enroll and receive benefits should contact the director of financial aid/veterans affairs. In order to receive benefits, veterans must maintain satisfactory progress as stipulated by the Veterans Administration and college policy. All prior credit earned through civilian or military education must be submitted to the degree plan specialist for transfer evaluation.
Withdrawal from the College

Students may withdraw with a grade of “W” through the end of the 14th week during regular semesters or the end of the 4th week during summer sessions, by completing a drop form in the Registrar’s Office. Students may also withdraw from the college by sending a written request for such action. The request must include the official signature of the student and the student’s address, social security number, phone number(s), and course names and numbers. The date postmarked on the envelope will be the official withdrawal date. Students should contact their professor prior to initiating a drop or withdrawal. Withdrawal from the college must be student-initiated.

Effective spring 1992, the last date to withdraw from developmental courses will be the end of the 14th week during regular semesters and the end of the 4th week during summer sessions.

A student who discontinues class attendance and does not officially withdraw will receive a performance grade for the course.

Safety and Security

Reporting Emergencies

If an emergency should arise on campus, report it to the Information Center receptionist located on the first floor of each campus. Contact faculty within the classroom if a problem should arise during class time. Emergency medical services will be provided for students when necessary.

If an emergency arises at an off-campus location, immediately notify a faculty member, who will then notify the building site supervisor.

Emergency Closing of the College

The president or his designee has the authority to discontinue instructional sessions because of extreme weather or other emergency conditions. If classes have been cancelled, local radio and television stations will make the announcement. A decision to cancel classes will usually be made by 3 p.m. for evening classes and by 6 a.m. for day classes.

Health Services

The college is dedicated to the total well-being of its students. Health fairs, alcohol and drug awareness programs, aerobic and other fitness courses are all geared toward student wellness. Although the college does not employ a nurse or physician, first aid kits are available at the Information Centers, Fitness Centers, Physical Plants, Student Activities Offices and division offices at both campuses. Should a student have a psychological or physiological problem, he or she should consult the dean of students for assistance.

Immunizations

Due to recent measles outbreaks, the Texas State Board of Health is strongly recommending all students born after January 1, 1957, confirm appropriate immunizations or immunity to the following diseases: tetanus/diphtheria, mumps, measles and rubella.

Disabled Students

Both Central Campus and Spring Creek Campus are accessible to individuals with disabilities. Special facilities such as elevators, restrooms and parking are provided to make college life more convenient. Lockers are available at Spring Creek Campus for students with temporary and permanent physical disabilities. To reserve a locker for an extended period, contact the Spring Creek Campus Student Activities Office (F129, 881-5788).

Additional services such as academic and personal advising, adaptive equipment and interpreters are available to students with physical disabilities. Services for Students with Disabilities (SSD) is located in the Student Development Center, G103 at Spring Creek Campus. Please call SSD at (214) 881-5950 (voice or TDD) for additional information.
STUDENT LIFE... INVOLVEMENT IN LEARNING

ADVICE

Academic advising is an integral component of each student’s success at CCCC and is an on-going process at the college. Any prospective student or Collin County resident interested in talking with an advisor should contact the Student Development Center at either campus. New students are advised through the Academic Advising Program prior to their first enrollment at CCCC. During their first semester, students are assigned to an academic advisor based on their declared educational objective.

Currently enrolled students are strongly encouraged to meet with their assigned academic advisor several times each semester to prepare and update their degree plans and evaluate their academic progress. Changes in major or advisor can be made by completing the appropriate forms available in the Student Development Center.

Academic advising in the Student Development Center offers students:

- assistance for undecided and new students in selecting a field of study:
  - a reliable source of information about the college;
  - facts about classes and programs;
  - help with registering as a CCCC student and adjusting to college;
  - assistance in tailoring course selection, course load and schedules to meet individual needs;
  - information about academic requirements;
  - a source of information about procedures involving dropping a class, appealing grades, registration, etc.;
  - a place to start when seeking to establish a degree plan (which may be filed upon completion of six semester hours);
  - transfer information for those seeking to attend a four-year institution (Transfer Lab);
  - a resource for students who are unable to meet with their academic advisors.

ASSESSMENT AND TESTING SERVICES

Testing Centers are located on both campuses for basic skills testing, proctoring and national testing. CCCC is an official testing site for the SAT, ACT and Texas Academic Skills Program (TASP).

BASIC SKILLS ASSESSMENT

Basic skills assessment is the process each student must complete to identify his/her strengths and/or weaknesses in the following three areas:

- Reading
- Writing
- Mathematics

Basic skills assessment is required for all first-time students and students who wish to enroll in any of the following courses.

- Reading: any college-level course which requires college level reading skills. Students who pass this TASP section are exempt from local assessment.
- English: English 040, 041 and 151. Students who pass the TASP writing section are exempt from local assessment.
- Mathematics: any developmental math course, Math 150, 151, 181, 182 and 183. Other assessments may be required based upon faculty and advisor recommendations.

Generally, assessment results are valid for one year. The results of the basic skills assessment assists an advisor and the student in proper course placement. These results are used for course placement only and do not affect the admission status of the student.

ASSESSMENT PRIOR TO TASP

Students required to participate in TASP (see “Texas Academic Skills Program,” page 10) must take TASP prior to accumulating more than 15 hours of college-level course work. If students have earned 15 credit hours at the end of a given semester, they must take TASP before they will be eligible to enroll in college-level work at any public institution of higher education in Texas. Students must participate in remediation based on local assessment scores in that semester if required.

If students enroll in 10 to 15 credit hours and are not exempt from TASP, they will be required to take locally administered assessments for course placement.
and advisement. **Students may not accumulate more than 15 hours without completing TASP.** For most students this will mean taking TASP in their first semester. TASP registration bulletins are available from the Admissions Offices, Testing Centers and Information Centers at CCCC.

**OTHER TESTING SERVICES**
The Testing Center also offers an extensive testing program for students and residents of the community in the following areas:
- CLEP—College Level Examination Program
- ACT—American College Testing Program
- SAT—Scholastic Aptitude Test
- Credit By Exam—Subject tests designed by CCCC faculty
- Correspondence Testing (A fee of $20 is required for test administration.)

CCCC codes for these tests are shown below.

- CLEP (Spring Creek & Central Campus) 1951
- ACT (Central Campus) 4046
- ACT (Spring Creek Campus) 4209
- SAT (Central Campus) 44-646
- SAT (Spring Creek Campus) 44-702
- TASP (Central Campus) 137
- TASP (Spring Creek Campus) 138

Students requiring more information on the above programs should contact the director of testing.

**FINANCIAL AID**
As a service to Collin County Community College students, the Financial Aid Office administers a financial aid program which includes scholarships, grants, loans and part-time employment, and its officers are trained to assist students in realizing their goals.

A primary purpose of the college’s financial aid program is to provide assistance for students who otherwise might find it difficult or impossible to attend college. All students are encouraged to apply for financial aid. Students should not withdraw from college for financial reasons without having first consulted the director of financial aid/veterans affairs. All financial aid students must familiarize themselves with the standards of academic progress. For more information call 548-6760 or 881-5760.

**SATISFACTORY ACADEMIC PROGRESS**
CCCC recipients of financial aid must meet or exceed the standards set for satisfactory progress for all students.

**ACADEMIC PROGRESS REQUIREMENTS**
Federal law requires that students must be making satisfactory progress in their course of study in order to receive financial aid. CCCC policy has the following requirements:

**GRADE POINT AVERAGE (GPA) REQUIREMENTS**

1. A student must maintain a 2.0 GPA for each semester or the combined summer sessions for which an award is approved.
2. A transfer student from a college outside of the district must have a cumulative 2.0 GPA as evidenced by an official academic transcript.

**COMPLETION REQUIREMENTS**

1. A student enrolled full time (12 credit hours or more) must complete a minimum of nine credit hours for any semester or the combined summer sessions for which funding is received.
2. A student enrolled three-quarter time (9-11 credit hours) or half time (6-8 credit hours) must complete a minimum of six credit hours for any semester or the combined summer sessions for which funding is received.
3. A student who is enrolled in three to five credit hours must complete all attempted credit hours.
4. An “IP” or “I” in developmental courses will satisfy the completion requirements. These grades, however, must be replaced as stipulated in the contract.

**FAILURE TO MEET THE STANDARDS OF ACADEMIC PROGRESS**

In these provisions, probation or suspension means financial aid probation or suspension, not academic probation or suspension.

1. Following the first semester in which the above standards of academic progress are not met, the student will...
be placed on probation and notified of that status. This status will remain for that semester of funding.

2. A new applicant with less than a cumulative 2.0 GPA or who does not meet the college standards of academic progress as outlined above will not have met the standards of academic progress; however, financial aid may be awarded on a probationary basis for one semester only.

3. The student who fails to meet the standards of academic progress during the semester of attendance while on probation will be placed on suspension and denied further funding for one semester or combined summer sessions.

4. During the first period of suspension, the student must enroll at least half-time for one semester at CCCC, pay the expenses related to that enrollment, and maintain the standards of academic progress before eligibility for financial aid will be re-established.

5. If failure to meet satisfactory progress results in a second suspension from financial aid, the student must enroll at least half-time for the equivalent of two semesters at the college, pay the expenses related to that enrollment, and maintain the standards of academic progress before eligibility for financial aid will be re-established.

6. Following any period of suspension, the student will again be eligible for funding on a probationary basis for one semester or combined summer sessions.

7. If failure to meet satisfactory progress results in a third suspension from financial aid, no additional aid will be awarded. Exceptions may be petitioned to the dean of students.

**Maximum Time Period for Completion of Educational Objectives**

1. Students receiving financial aid funds will be expected to complete his or her educational objective or course of study within a reasonable period of time. The maximum hour limit for CCCC is 75 credit hours (including transfer work), excluding developmental education courses.

2. Funding beyond the maximum hour limit may be approved by the director of financial aid and must be based on mitigating circumstances.

**Appeal Process**

1. A student who has been denied financial aid because of a failure to meet any of the criteria of the standards of academic progress may petition the director of financial aid to consider mitigating circumstances. The director will render a decision.

2. If the student is dissatisfied with the director's decision, he/she may petition the financial aid appeals task force which will investigate the petition and render their recommendation to the dean of students. The dean of students will make a decision based on the facts of the case and serve as the final appeal authority.

**Effects on Funding**

1. Certain courses not considered for funding are:
   a. courses taken as an audit, and
   b. courses taken outside the degree plan; however, developmental courses, if required as a prerequisite to enable a student to successfully complete a student's educational goal, will be considered for funding.

2. Credit hours earned by a placement test will not be considered for funding.

3. Courses for which an "I", "F" or "W" grade is received will not be treated as completed courses. An "I" or "IP" in developmental courses will satisfy the completion requirements.

4. Repeated courses will be considered for funding.

5. Financial aid may be paid for developmental courses that are prerequisites for credit courses. A student may be paid for a maximum of 24 developmental hours.


**FINANCIAL AID PROGRAMS**

**FEDERAL ASSISTANCE**

**Pell Grant**

Eligibility for the Pell Grant is based on the financial strength of the student and/or the student’s family as well as the student’s enrollment status. This can range from $100 to $2,400 per year.

**Supplemental Educational Opportunities Grant (SEOG)**

The SEOG provides assistance for eligible students who show financial need and are making satisfactory progress towards their educational goal. Priority consideration is given to students demonstrating the greatest amount of financial need. This can range from $200 to $4,000 per year.

**Collegiate Work Study (CWS)**

Students demonstrating financial need may be considered for the work study program. Students are employed to work at various jobs on campus or at other district sites. They are allowed to work to earn the amount that is designated in their award package. This can range from $200 to $3,060 per year.

**Stafford Loan Program**

This program permits a student to borrow money from a commercial lending agency without need for collateral. The federal government guarantees repayment of the loan and also pays interest on the amount borrowed until six months after the student graduates or ceases to be at least a half-time student. Eligibility is based on financial need. Students can borrow up to $2,625 per classification level (24 hours).

**STATE ASSISTANCE**

**Texas Public Education—State Student Incentive Grant (TPEG)**

The TPEG program is a state financial aid program designed to assist students attending state supported colleges. Students must show financial need and be making satisfactory progress toward their educational goals. The actual amount of the grant will vary depending on the availability of funds to the college, the student’s family financial condition and other financial aid the student may be receiving. This can range from $100 to $2,400 per year.

**TEXAS PUBLIC EDUCATION—STATE STUDENT INCENTIVE GRANT (TPEG-SSIG)**

The TPEG-SSIG is a state program that bases grants upon the financial need of the applicant. Eligibility is determined by the college based upon financial need and the availability of funds. This can range from $200 to $1,000 per year.

**Scholarships**

Scholarships at Collin County Community College are generally awarded on the basis of academic achievement, need, merit, special population or a combination of each. Scholarships are designed to encourage and assist students in pursuing academic excellence, merit and leadership roles. All students are encouraged to apply.

Some of the scholarships available are: Carole Anthony, Dr. John H. Anthony Endowment, Botsford, Christ United Methodist Men’s Club, Collin County Legal Secretaries Association, Cooperative Work Experience Student of the Year Award, James E. Conner Memorial, Eric Funk, Jackie Dooley Memorial Scholarship for Learning Disabled Students, Frito-Lay Endowment, HCA Medical Center of Plano Endowment, John Ferguson Endowment, Foundation Scholar’s Program, Louise M. King Endowment, Performing Arts, Rodeo Club, Trustee-Merit Based and the E.L Roy-H.P. Cohick.

Scholarship information is located in the Financial Aid Office.

**OTHER TYPES OF ASSISTANCE**

**Tuition Waivers**

The State of Texas offers a number of tuition exemption programs. These programs provide exemptions from certain tuition and fee charges in public colleges. Applications and information about these tuition waivers may be obtained in the Financial Aid Office. Some of the tuition waivers are:

- Hazlewood Act
- Honor Graduates
- Orphans of National Guard Members
- Blind/Deaf Students
- Children of Disabled Firemen and Peace Officers
- Children of Prisoners of War or Persons Missing in Action
• Firemen Enrolled In Fire Science Courses
• Ad Valorem

**Veterans' Educational Benefits**
Collin County Community College is fully approved for training of veterans under the provision of the G.I. Bill (Public Laws 346, 550, 16, and 89-358). Veterans and dependents of veterans should apply to the Financial Aid/Veterans Affairs Office before the school term begins. Paperwork should be filed six weeks prior to registration, if possible. This gives the VA Regional Office time to process the papers and to communicate with the veteran prior to registration.

Veterans must maintain satisfactory progress as stipulated by the Veterans Administration and college policy. All prior credit earned through civilian or military education must be submitted to the degree plan specialist for transfer evaluation.

**Additional Financial Aid Information**
Many of the financial aid programs listed are under constant state and federal review. These programs and awards are subject to change.

Students may apply for financial aid simply by completing a Financial Aid Form or American College Testing Form which is available in the Financial Aid Office and in most high school counseling offices. The priority deadline is as follows:
• Fall semester — June 1
• Spring semester — November 1
• Summer semester — March 1

**Career Planning and Placement**

**Future Shop**
The Future Shop is available on both campuses and offers a variety of opportunities for students to explore career options and to prepare for the world of work. The Future Shop is designed with three basic components: career assessment and exploration, job grooming, and job placement and transition support.

**Career Assessment and Exploration**
The following resources are available in the Future Shop:
• Interest assessments*
• Personality and values assessments*
• “Discover” — Computerized Career Guidance Program
• GIS — Computerized Guidance Information system
• Career Resource Library
  - Occupational Information
  - Personal Development
  - Career Planning/Job Search
  - Video Cassette
• Annual Career Awareness Week
• Workshops/Seminars
• Mentor Program

*Effective March 1, 1991, a fee scale was implemented for all non-Collin County Community College students desiring to take career assessments. Please contact the Future Shop at Central Campus (A108, 548-6720) or Spring Creek Campus (G103, 881-5781) for additional information.

**Job Grooming**
The following resources are located in each lab
• *Free Resume and Cover Letter Service:* “The Perfect Resume” computer program offers a variety of formats for professional resumes. Laser printed copies of resumes are produced. Individual critiques of resumes are available.

• *Interview Coaching*
• *Videotaped Interviews:* Mock interviews with an individual critique help prepare students for actual interviews.

**Job Placement/Transition Support**
Placement services are limited to current students. The following resources are located in each lab:
• *On-Campus Employment:* A variety of positions are available on campus for students. Student jobs are classified as College Work-Study (CWS) or non-College Work-Study positions.

• *Off-Campus Employment:* Job Location and Development (JLD). The JLD office develops off-campus employment sites. A current listing of off-campus positions is maintained. Part-time as well as full-time jobs are listed. Applications for on-campus and off-campus positions are available in the Future Shop.
ARTICULATION AND TRANSFER PROGRAMS
A transfer lab is available to students on both campuses in the Future Shop located in the Student Development Center. The transfer lab is designed to help students transfer courses and/or programs from CCC to four-year institutions. Check the Transfer Lab for up-to-date information on other institutions.

- Students are encouraged to meet with an advisor in their field of study.
- Four-year institutions determine courses which will be required for degrees. Check the course catalog for up-to-date degree plans.
- Some courses are designed for job entry and career preparation and may not meet degree requirements.
- Courses in developmental education and some courses in human development are designed for individual skill and personal improvement and generally will not transfer to a four-year institution.
- Check the specific course catalog for admission, housing, scholarship and financial aid deadlines.

When duplicating (repeating) a course at CCC, check with the receiving institution on their policy for accepting course duplications.

“NEXT STEP”—TRANSFER PROGRAM
“Next Step” is a program designed to assist students’ transition from CCC to four-year institutions by providing the following:
- Group tours of four-year institutions
- Peer support through a networking system of transfer students on campus
- List of course equivalencies for CCC and four-year institutions
- Resource materials
- Information on transfer of credit
- Directory listing addresses and phone numbers for four-year institutions
- Course and program transfer guides

- Library of catalogs for both out-of-state and Texas colleges and universities.
- Degree plans for four-year institutions

It is the responsibility of students to check with the college or university to which they wish to transfer for all requirements. The student should know admissions requirements, specific department requirements, deadlines and courses that will satisfy a specific degree.

STUDENT SUCCESS PROGRAMS
The college offers many specialized programs and activities that are designed specifically to help students achieve their academic and career goals. The following are some of the program areas devoted specifically to helping students succeed.

HUMAN DEVELOPMENT PROGRAMS
Credit and non-credit courses and seminars are available for students wishing to enrich their development in areas such as study skills, stress management, leadership development, test taking, personal development and career planning.

Through the Alternative Learning Center (ALC), located in the Learning Resource Center, students may also use self-paced programs on time management and study skills.

INTERDISCIPLINARY HONORS PROGRAM
The Interdisciplinary Honors Program (IDH) at CCC is designed to create a challenging and enriching environment for students who qualify by demonstrating a high commitment to learning. In small classes (a maximum of 18 students per class) students who have a 3.5 GPA after 12 hours at CCC or those recommended by professors are invited to explore various critical issues and concerns in a highly charged atmosphere of enthusiastic students. Classes engage in various projects not possible in the curriculum of regular classes. Two such projects have been the publication of the literary journal Forces by an English class and a mock trial presented by a history class. Among other benefits to students are an honors designation on each individual’s transcript and possible qualification for honors scholarships.
High school students will be considered for IDH classes if they have maintained a grade point average of at least 3.5, have a ranking in the top 10 percent of their high school class, have attained a combined score of 1100 on the SAT or have received an ACT score of at least 25.

Inquiries are welcomed. Please contact the director, at 881-5808 or 881-5811 for more information.

**Developmental Education**

Developmental education courses are designed to provide students with the basic skills needed to achieve success in college-level courses. Currently, courses are offered in math, reading, writing and ESL. The instructional formats vary and include individualized, self-paced and lecture approaches. If basic skills assessment scores indicate that a student would be better prepared by taking a developmental education class prior to enrollment in a college-level class, the student will not be allowed to enroll in the college-level class.

Developmental classes and other support programs are specifically designed to help students gain the skills and self-confidence needed to successfully complete credit courses. Since the fall of 1989, the implementation of Texas House Bill 2182 (TASP) mandated that students who are not ready for college-level courses must take developmental classes. Each of the developmental disciplines (mathematics, reading and writing) is designed to provide the skills tested on TASP.

In addition to the courses, developmental education also offers study skill seminars which teach students basic study and test-taking skills. A schedule of these free seminars is published each semester. Copies of the schedule may be obtained at the Information Center at both campuses. Please call 881-5720 for additional information.

**Project SPARK**

Project SPARK (Student Program to Achieve and Reinforce Knowledge) is a federally-funded program designed to help first-generation, disabled and/or low-income students. Among the services provided are counseling, tutoring, basic skills instruction and culturally enhancing activities. Please call 548-6827 or 881-5627 for additional information.

**SUCCESS**

SUCCESS is a cooperative work experience program that unites classroom study with community service. Students approved for the program receive a stipend for volunteer community service projects. The program helps to develop a unique linking system which bonds students to their communities and increases their civic knowledge.

**Library/Learning Resources Center (LRC)**

The LRC is located on the first floor of Central Campus and is a two-story facility facing the atrium at the entrance of Spring Creek Campus. Available materials include the following:

- Books 80,000
- Videotapes 3,500
- Phonograph Recordings 1,200
- Periodicals 800

A computerized system is available to help students and faculty locate these materials, most of which are available for home use.

**Hours**

The LRC is scheduled to be open during the following hours for the 1991-92 term:

- **Central Campus**
  - Monday–Thursday: 7:45 a.m.–9:30 p.m.
  - Friday: 7:45 a.m.–5 p.m.
  - Saturday: 8 a.m.–noon
  - Sunday: closed

- **Spring Creek Campus**
  - Monday–Thursday: 7:45 a.m.–10 p.m.
  - Friday: 7:45 a.m.–5 p.m.
  - Saturday: 9 a.m.–4 p.m.
  - Sunday: 1–5 p.m.

Special hours and break periods will be posted in advance. All hours are subject to change.
Borrowing Privileges and Materials
The libraries at both Central Campus and Spring Creek Campus are available for use by students and the public. The total collection of 80,000 volumes will be reflected in the computer catalog at both campuses and will show the location of books by campus. Each campus will not necessarily have the same books or other materials. Students will have the option of visiting and using both campuses or arranging to have books and tapes delivered from one campus to another within a 24-hour period.

Loan Period
Books may be checked out for three weeks. Books must be returned at either Central Campus or Spring Creek Campus by the due date stamped on the slip in the inside front cover of the book.

Community Borrowers
All residents (students and non-students) of Collin County are welcome to use the LRC and check out materials. For community borrowers who are non-students the only requirements are that the individual be 18 years of age and show proof of residency within Collin County. There is no charge for borrowing privileges to non-students.

Special Features of the LRC

Alternative Learning Center (ALC)
The ALC provides experiential, cross-disciplinary approaches to learning through the use of video, computers, telecommunications and progressive instructional design. It houses hundreds of instructional computing programs in dozens of areas of academic, business and personal interests. A microcomputer “Classroom of the Future,” telecourses and self-paced courses offer flexible scheduling for students with hectic schedules. Television courses, available through the ALC and broadcast on KDTN (channel 2), are taught in a lab environment or are available for review. Writing and reading elements of the developmental education program are also available in the ALC. ALC programs and services are available to all CCCC students and Collin County residents.

Bijou and Ritz Theatres
Learning theatres are available to students to view feature films and educational videotapes in a non-classroom setting. These theatres are available on a scheduled basis. See the weekly program guide for specific titles.

Individual Viewing Booths
Such booths are located throughout the library and are available to students to view videotapes on an individual basis.

LRC Handbook
A handbook is available to students to assist them in learning how to use the library.

Photocopying
A coin operated photocopying machine is available for student use in the LRC on both campuses. The cost is 10 cents per page copied.

Plano Public Library
Beginning in the summer of 1991, the LRC will have some integrated terminals which will show holdings of both the LRC and the Plano Public Library in one easy-to-use arrangement.

Association of Higher Education (AHE) Catalog on Compact Disc (at Spring Creek Campus only)
A computer terminal is available which shows the holdings of five AHE libraries: Baylor University, Dallas County Community College District, Dallas Public Library, University of North Texas and University of Texas at Arlington. These compact discs not only give the catalog of the five libraries, but they also make the over one million volumes available through interlibrary loan via an overnight courier service.

Microcomputer Laboratory (at Spring Creek Campus only)
A sophisticated, networked microcomputer laboratory is available to students for course-related learning activities.

Texaville Room (at Spring Creek Campus only)
This lounge area also offers students informed learning experiences.

Experiential Learning
Collin County Community College is committed to a competency-based curriculum which emphasizes experiential learning. Many courses and programs include a laboratory element which focuses on the application of methods of inquiry. This allows stu-
dents to integrate cognitive and affective learning.

A variety of learning laboratories are in use at CCCC to facilitate experiential learning by students. These facilities include science labs, a word processing lab and model office, a language lab and the Alternative Learning Center. Other labs include math, writing, social science and open computer labs.

**Math Lab**
To enable students to secure instructional assistance in mathematics, a fully staffed math lab is provided for students enrolled in developmental and college mathematics courses. In addition to professional and peer tutoring, students have an opportunity to use slide/tapes, videos and computerized programs to reinforce classroom lectures.

The Math Lab is open Monday through Thursday from 8 a.m. to 9:30 p.m., Friday from 8 a.m. to 4 p.m. and Saturday from 9 a.m. to noon. The drop-in lab hours vary each semester and a published schedule is available at the beginning of each term.

**Writing Lab**
CCC is committed to “writing-across-the-curriculum” (WAC) and encourages students to use the services available in the Writing Center. The purpose of the Writing Center is to allow students desiring help with Writing assignments to obtain it, to offer supplemental preparation for the Developmental Writing Exit Exams and English 151's EDF (English Departmental Final), and to foster the development of the writing-across-the-curriculum program by providing writing instruction for students with assignments in other disciplines. The schedule of hours for centers at both campuses is published each semester, no appointment is necessary.

**Social Science Lab**
The Social Science Lab provides students with the opportunity to conduct research in any of the social sciences. This includes practical applications of theoretical principles from course work as well as original projects to promote the use of methods of inquiry in the respective social sciences.

The laboratory is equipped with computers, audio-visual equipment, biofeedback equipment and other state-of-the-art equipment. The facility includes an observation booth that connects the two laboratory research rooms.

**Open Computer Lab**
The Instructional Computer Lab provides general assistance in the use of microcomputers for the completion of lab assignments. The labs operate on a drop-in basis and provide an atmosphere for non-traditional learning experiences in all areas of instruction. Many programs offered at CCCC use microcomputers as an integral component of their courses.

Software is available for word processing, electronic spreadsheet, database applications, text editing, graphic arts, programming and computer-aided instruction in many subjects. Other materials available include business magazines, computer magazines, tapes and slides for self-paced courses, and software manuals.

In addition to the learning laboratories on campus, many programs offer internship and cooperative work experience opportunities to students. This on-the-job experience allows students to obtain valuable career training while completing academic courses and programs.

**Telecourses**
Telecourses are an alternative to the traditional classroom method of learning and earning college credit.

CCC offers a variety of credit courses through instructional television from the Alternative Learning Center (ALC).

Students are not required to come to campus as often for a telecourse, since much of the course work can be done in the student’s home. All assignments are carefully explained in the Written course materials, but the student must supply the motivation and discipline to complete each week's work.

Upon successful completion of a telecourse, a student will receive full college credit. All courses apply toward associate degree requirements, many fit into certificate program requirements, and the
majority fulfill requirements for B.A. and B.S. degrees. Consult the current semester’s schedule of classes for available telecourses.

**COOPERATIVE WORK EXPERIENCE**

Cooperative Work Experience (CWE) at CCCC includes not only the traditional voc/tech cooperative education opportunity but is also available in academic internships as well as service learning in non-paid volunteer community service projects.

CWE is a unique plan of education which integrates classroom study with planned and supervised work experience. This educational pattern allows students to acquire practical skills as well as to be exposed to the reality of the world beyond the boundaries of the campus, thus enhancing the self-awareness and direction of the participants.

To be eligible for Cooperative Work Experience at CCCC, students must be working toward a degree or certificate, have a minimum grade point average of 2.5, and be concurrently enrolled in another credit course at the college.

A student who is presently employed may use their current job if it relates to their ultimate career goal. Working a minimum of 20 hours per week for a 16-week semester allows a student to earn three to four semester hours of college-level credit toward a degree.

**STUDENTS WITH EDUCATION AND EXPERIENCE (S.E.E.)**

S.E.E. is a cooperative education based retention program for students who are at risk of leaving the educational system. It features an innovative curriculum, a mentoring program and a career tracking plan. S.E.E. is open to all qualified students whose educational and career goals allow for enrollment in a cooperative education class. CCCC is committed to providing professional growth through experience-based education.

**INTERNATIONAL STUDY PROGRAMS**

The college offers international study programs in a variety of fields to help prepare students for the increasingly internationalized world. International programs (some offered in alternate years) include Month-In-Pans, British Isles, International Internships, Marine Biology-in-Cornell and Spanish Language Programs.

**MONTH-IN-PARIS PROGRAM**

This program offers a combination of study and travel to Paris, France for students interested in the French language and western world art. Students live and study in Paris during the month of July and earn seven college-level credits. A unique feature of the program is that no previous language training is required.

**BRITISH ISLES PROGRAM**

Students spend three to four weeks in Britain and earn college credit through the study of literature, photography or other varied topics.

**INTERNATIONAL INTERNSHIPS**

From time to time the college may offer students opportunities to earn credit by working abroad in fields such as nursing, photography or child care. Interested students should inquire at the office of the appropriate division dean.
**Marine Biology-in-Cozumel Program**

An increasing awareness of the global importance of the ocean environment has led to the establishment of this program which features a one-week field trip to Cozumel, Mexico. Students earn four credits for enrolling in Marine Biology (BIOL 153) and for participating in its field trip which emphasizes reef ecology and the biology of reef organisms. SCUBA certification is required.

**Spanish Language Program**

Involving intensive language study in Mexico or Spain, the Spanish language program will be offered for the first time in the summer of 1992. Students earn transferable college credit, study Spanish with native teachers and develop first-hand knowledge of Hispanic culture.

**Student Activities**

**Student Activities Programs**

College administrators and faculty believe that students’ involvement in their educational experience greatly increases their likelihood of having successful and rewarding college careers. All students, therefore, are encouraged to participate in co- and extra-curricular activities that will foster social, cultural and educational growth.

The Student Activities Office offers traditional campus events such as entertainers, special activities, cultural events, competitive games, etc. In conjunction with CCCC’s laboratory component, many student activities programs integrate in-class material with events outside the traditional classroom environment. Guest speakers, art exhibits, displays and field trips are all a part of student activities.

A variety of registered student organizations and college task forces offer opportunities for involvement and students are encouraged to form new organizations to further their own interests. The director of student activities and the student activities associate are available to assist students in becoming involved in college programs and activities.

**Involvement in Institutional Governance**

Students are encouraged to become involved with institutional governance by expressing their thoughts and feelings about college policies, procedures and activities. The president, vice presidents and other administrators of the college are interested in the reactions, opinions and ideas of all students. Through representation on college task forces, article submissions to the “Student Update” newsletter, participation in President’s Luncheons and personal conversations with administrators, students are encouraged to communicate their needs, desires and proposals for change.

In addition, students are encouraged to form relevant organizations and special interest groups to further their own interests and become involved with the college through co- and extra-curricular activities, during the times posted.

The Central Campus Fitness Center consists of locker room facilities, Universal weight machines, rowing machines, treadmill, bicycles and aerobic dance area. The Spring Creek Campus Fitness Center consists of the main gymnasium with rubber running track; weight training room with Universal Super Circuit single station weight machines, free weights, treadmills, Stairmaster, rowing machines and bicycle ergometers; dance studio; four racquetball courts; locker room facilities with sauna; eight lighted tennis courts; outdoor running trail; and playing fields.

Before beginning a new exercise regimen, students, faculty, staff and community members are encouraged to take a fitness assessment in the Wellness Center. Contact the
wellness director to set up an individual wellness program.

Collin County residents who are not enrolled in classes at the college will have the opportunity to take advantage of these facilities at night and on weekends with a $45 per semester paid membership. Contact the Fitness Center at either campus (CC: B207, 548-6891; SCC: A103, 881-5848) for further information and hours of operation.

**Intramurals**

The intramural sports program includes volleyball, basketball, flag football, softball, soccer, bowling, golf, racquetball and tennis. These are an integral part of the total physical education program at CCCC. For information, contact the director of intramurals, 881-5848 or 548-6848.

**Intercollegiate Athletics**

The college offers intercollegiate athletic programs in men’s basketball, baseball and tennis, and in women’s volleyball and tennis. These teams are affiliated with the National Junior College Athletic Association (NJCAA) and participate in regional events which may lead to national competition. To participate in intercollegiate athletic programs at CCCC, students must be enrolled full-time (12 semester hours) and maintain a 2.0 GPA each semester. Contact the athletic director for more information at 881-5888.

**Music Program**

The Music Department at CCCC offers a full curriculum of music study including music theory, music literature, choral and instrumental ensembles audio recording techniques, electronic music production as well as class and private lessons.

Students and community members interested in musical performance are encouraged to join one of three choral groups: jazz choir, concert choir and community choir. Admission to the jazz choir is by audition only. Performances by all three choirs are held throughout the school year, both on and off campus. Other opportunities for musical involvement include:

- Choral Band;
- Collin County Community Choir;
- Flute Choir;
- Concert Choir;
- Guitar Ensemble;
- Jazz Choir;
- Jazz Lab Band;
- Madrigals;
- Plano Community Band;
- Plano Civic Chorus; and
- Wind Ensemble.

The music facility at Spring Creek Campus is one of the finest in the southwest. The 6,000 square foot space houses band and choral rehearsal rooms, a 16-track professional recording studio, five practice rooms, a CAI music lab and a MIDI electronic piano lab. For further information contact the Music Department (SCC: B183, 881-5807).

**Speech and Theatre Programs**

CCCC’s speech communications and theatre departments offer a wide range of opportunities for students interested in the performing arts and in various other forms of communication. Credit courses in these areas go beyond the classroom to allow students to develop their communication and performance skills before local, state and national audiences.

SPCM 291 (Oral Interpretation) provides the opportunity to deliver dramatic and humorous monologues and to practice poetry and prose recitations. Students end the semester with a campus-wide readers’ theatre production. Students in SPCM 192 (Forensics Workshop) participate in faculty-student debates, campus auctions and speech competitions throughout the country. Students enrolled in SPCM 295 (Radio and TV Announcing) learn on-camera announcing techniques and gain experience in news broadcasting and interviewing.

In addition to communication classes, students have a multitude of opportunities for dramatic performance through the newly developed theatre program. From small “black box theatre” shows to large-scale musical productions, the theatre department provides experience for performers of all levels.
Collin County Community College is dedicated to presenting dynamic and flexible educational programs to the community throughout our geographical area.

The college strives to make programs readily accessible and bring "lifelong learning" opportunities to the public as conveniently and economically as possible.

Lifelong learning goes beyond initial career preparation, traditional concepts of full-time study and program degree completion and encourages education renewal. CCCC endeavors to provide lifelong learning for people of all ages to develop their personal and professional potential, upgrade job-related skills and prepare for informed participation in the civic, cultural and political life of the community.

The college, through Enterprise, can provide services which encompass a broad range of purposes:

- addressing adults' career needs by assisting them to cope with the explosion of new information and techniques, work toward job advancement, or move into a new career;
- providing job-specific customized training for use by business and industry with curricula relevant to needs of the local economy;
- contributing to the growth and development of local business and industry through economic development activities on local, state and national levels;
- responding to the non-academic or extra-curricular interests and needs of adults by providing a sufficient number of personal development courses by request;
- offering community service activities designed to help disadvantaged individuals and communities;

- facilitating the interplay between the college and the community;
- expanding awareness and understanding of public issues affecting the local, state and national economy;
- providing activities that enhance the community's awareness of the arts.

Each of these specific purposes within Enterprise relates to the purpose of promoting the philosophy of "lifelong learning" at CCCC.

A vital part of Enterprise is a flexible continuing education program which offers courses, program and conferences geared to professional development. Course material is adapted to the needs of the particular groups of participants. Courses may be started at any time there is sufficient enrollment and are continued as long as necessary to meet participant needs.

**Continuing Education**

The Continuing Education Office publishes a brochure each semester with approximately 400 courses pertaining to business and professional development, personal development and extra-curricular activities. Conferences and seminars on special topics are also offered throughout the year.

**Contract Training**

The Contract Training Office responds immediately to the current needs of business and industry by delivering job-specific customized in-house training. This may mean entry-level or a "quick start" training of employees of new and expanding business and industry, re-training of employees for new technological developments or extension of technical assistance to business and industry in the essential
managerial functions of planning, organizing, implementing and controlling.

**Small Business Development Center (SBDC)**

The SBDC, a partnership between the U.S. Small Business Administration and Collin County Community College, aims to promote the economic health and success of small businesses in Collin county. The SBDC provides free, in-depth small business counseling as well as seminars and workshops on topics relevant to established, new and potential small business owners.

The offices of Continuing Education and Contract Training may offer courses which award credit as Continuing Education Units (CEU), depending upon the offering. CEUs are nationally recognized to record satisfactory completion of certain approved occupationally related programs. Certificates are awarded upon completion of the course. Courses are offered throughout the county at a variety of sites depending on the types of courses and availability of facilities.

**Economic Development**

The Office initiates and participates in economic activities which contribute to the growth and development of county-wide business and industry.

**Collin County Training and Employment Program**

The Collin County Training and Employment Program is a joint effort between the college and the Job Training Partnership Act (JTPA). Collin County has been designated a JTPA Service Delivery Area with CCCC as the administrative entity for JTPA. Eligible persons who need to enter or re-enter the work force may qualify for employment training services. Special services are also provided to youth (ages 14-21), dislocated workers, welfare recipients, single parents and displaced homemakers.

Contact the CCTEP Office at 542-0490 in McKinney and 881-5850 in Plano for more information.

For more information on how Enterprise can be your connection to lifelong learning, please call 548-6851 (Central Campus) or 881-5851 (Spring Creek Campus).
DEGREE PROGRAMS

Collin County Community College offers three degrees and a number of certificates. Offerings include Associate of Arts (A.A.), Associate of Science (A.S.) and Associate of Applied Science (A.A.S.) degrees. The areas of study on the following pages reflect the courses which are suggested to obtain an associate degree or certification. In addition, anyone may take courses without obtaining a degree.

Students with academic deficiencies are encouraged to take developmental courses to correct the deficiencies before they enroll in college-level courses. Developmental courses do not satisfy any graduation requirements or transfer to four-year institutions.

Students should contact their academic advisors for further information.

ASSOCIATE OF ARTS—AREAS OF STUDY
Accounting
Art
Business Administration
Criminal Justice
Economics
English
Fire Science
French
Geography
History
Legal Assistant
Music
Philosophy
Photography
Political Science
Pre-Law
Psychology
Sociology
Spanish
Speech Communication
Theatre

ASSOCIATE OF SCIENCE—AREAS OF STUDY
Biology
Chemistry
Computer Science
Education
Engineering
Horticulture/Landscape Technology
Mathematics
Physical Education
Physics
Pre-Dental
Pre-Medical
ASSOCIATE OF APPLIED SCIENCE—AREAS OF STUDY

Accounting
Advertising Art
Child Development:
   Early Childhood Administrator
   Early Childhood Educator
Computer Information Systems:
   Business Programming
   Computer Systems
   Microcomputer Applications
Computer Science:
   Software Development
Electronics Engineering Technology
Electronic Technology
Emergency Medical Services
Engineering Technology:
   Drafting and Computer Aided Design
   Drafting and Computer Aided Design—Electronic Design Option
   Drafting and Computer Aided Design—Manufacturing Option
Fire Science
Horticulture/Landscape Technology:
   Horticulture Technology
   Landscape Technology
Legal Assistant
Management:
   Management Development
   Small Business Management
Marketing:
   General
   Fashion Marketing
Nursing (ADN)
Office Administration:
   General
   Medical
   Secretarial
Real Estate
Respiratory Care

CERTIFICATE PROGRAMS—AREAS OF STUDY

Advertising Art:
   Computer Graphics
   Illustration
   Photography
   Production Art
Child Development:
   Early Childhood Administrator
   Early Childhood Educator
Computer Information Systems:
   BASIC Programming
   COBOL Programming
   Computer Applications
   Computer Operating Systems
   Database Applications
   Desktop Publishing
   Information Systems Management
   Integrated Spreadsheets
   Networking and Telecommunications
   RPG Programming
Eating Disorders Counselor
Electronics Engineering Technology:
   Computer Option
   Electronic Communication Option
Electronic Technology
Engineering Technology:
   Drafting and Computer Aided Design
   Electronic Design
   Manufacturing Design
Fire Science:
   Basic Firefighter
Management:
   Business Management
   Small Business Management
Marketing
Office Administration:
   Medical Office
   Office Support
   Word Processing
Real Estate
ASSOCIATE OF ARTS DEGREE PROGRAMS

The Associate of Arts degree provides general academic courses which enable students to transfer to a four-year institution of their choice. It is the student's responsibility to choose a college or university as soon as possible and to determine the specific degree requirements of that institution. Students should consult with a CCCC advisor and the four-year institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

GENERAL EDUCATION CORE REQUIREMENTS: (CH = CREDIT HOURS)

I. ENGLISH
9 CH to include:
   6 CH ENGL 151-152 Composition/Rhetoric I & II
   3 CH Sophomore Literature

II. SPEECH COMMUNICATIONS¹
3 CH SPCM 151 Fundamentals of Speech Communication

III. SOCIAL SCIENCES
12 CH to include:
   6 CH HIST 151 U.S. History I and
   HIST 152 U.S. History II
   6 CH PLSC 261 American Government I and
   PLSC 262 American Government II

IV. MATHEMATICS AND NATURAL/PHYSICAL SCIENCES¹,²
3 CH MATH 150 Contemporary Mathematics (or higher as determined by major field of study)
6-8 CH BIOL 151 Introduction to Biology I
   BIOL 152 Introduction to Biology II
   CHEM 151* Introduction to Chemistry
   CHEM 152* Introduction to Chemistry
   PSCI 151* Physical Science I
   PSCI 152* Physical Science II
   PSCI 153 Elementary Astronomy
   PSCI 154 Earth Science
*Prerequisite: high school algebra or equivalent

V. COMPUTER LITERACY
3 CH CPSC 150 Introduction to Computers

VI. HUMANITIES¹
3 CH HUM 151 Introduction to Humanities or
   PHIL 151 Introduction to Philosophy
   PHIL 152 Logic
   PHIL 153 Ethics
   PHIL 154 Comparative Religion

VII. BEHAVIORAL SCIENCE
3 CH PSYC 151 General Psychology or
   SOC 151 Introduction to Sociology

VIII. HEALTH, PHYSICAL EDUCATION AND DANCE
2 CH HPED Any activity course
**GENERAL EDUCATION CORE  44-46 CREDIT HOURS**

**ELECTIVES (SEE PAGES 39-42)  14-16 CREDIT HOURS**

**TOTAL  60 CREDIT HOURS**

- The **general education** core for the Associate of Arts degree consists of 44-46 credit hours. The **electives** and/or **major field of study** consists of 14-16 credit hours. This degree requires the completion of a minimum of 60 credit hours, including at least 18 hours earned at CCCC.

- Waivers for physical education requirements may be granted for medical reasons. A written **statement** from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).

- Foreign **languages**—Students planning to transfer to a four-year institution should contact the transfer institution before beginning work toward the A.A. or A.S. degrees. Some colleges and universities require two years of a foreign language for the completion of the bachelor's degree.

  1. **Students planning to transfer to a four-year institution should check the specific degree plan requirements located in the Transfer Lab.**

  2. Higher levels of mathematics and science may be substituted with advisor approval.

**ASSOCIATE OF ARTS**

**ELECTIVES FOR AREAS OF STUDY**

**ACCOUNTING**

*(14-16 CREDIT HOURS)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 191</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 192</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 193</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 291</td>
<td>Principles of Economics-Macro</td>
<td>3</td>
</tr>
<tr>
<td>ECON 292</td>
<td>Principles of Economics-Micro</td>
<td>3</td>
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<tr>
<td>MATH 152</td>
<td>Calculus for Business and Economics</td>
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</table>

*Math 151 recommended in general education core*

**BUSINESS ADMINISTRATION**

*(14-16 CREDIT HOURS)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGL 252</td>
<td>Forms of Literature II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 151</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MATH 152</td>
<td>Calculus for Business and Economics</td>
<td>3</td>
</tr>
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</table>

*Math 151 recommended in general education core*
## Criminal Justice

(14-16 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CRJS 151</td>
<td>Crime in America</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 152</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 153</td>
<td>Fundamentals of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 154</td>
<td>The Court and Criminal Procedure</td>
<td>3</td>
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## Business Administration

(12 CREDIT HOURS)

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<tbody>
<tr>
<td>BSAD 122</td>
<td>Principles of Management</td>
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## Psychology

(3 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PSYC 253</td>
<td>Psychology of Personality</td>
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## Sociology

(3 CREDIT HOURS)

<table>
<thead>
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<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>SOC 152</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 153</td>
<td>Human Sexuality</td>
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## Minor Studies

(3 CREDIT HOURS)

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SOC 252</td>
<td>Social Psychology</td>
<td>3</td>
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<tr>
<td>SOC 253</td>
<td>Minority Studies</td>
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## Economics

(14-16 CREDIT HOURS)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 291</td>
<td>Principles of Economics-Macro</td>
<td>3</td>
</tr>
<tr>
<td>ECON 292</td>
<td>Principles of Economics-Micro</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 191</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 192</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>CIS 136</td>
<td>BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>Forms of Literature II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 151</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>MATH 152</td>
<td>Calculus for Business and Economics</td>
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## Mathematics

(3 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>MATH 153</td>
<td>Statistics</td>
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</tbody>
</table>

*Math 151 is recommended in general education core.

## English

(14-16 CREDIT HOURS)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ENGL 241</td>
<td>Creative Writing</td>
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<tr>
<td>ENGL 251</td>
<td>Forms of Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 252</td>
<td>Forms of Literature II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 253</td>
<td>British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 254</td>
<td>British Literature II</td>
<td>3</td>
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<tr>
<td>ENGL 255</td>
<td>American Literature I</td>
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<tr>
<td>ENGL 256</td>
<td>American Literature II</td>
<td>3</td>
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<tr>
<td>ENGL 257</td>
<td>World Literature I</td>
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<tr>
<td>ENGL 258</td>
<td>World Literature II</td>
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*Foreign Language Sequence I: 4
*Foreign Language Sequence II: 4

## History

(14-16 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HIST 251</td>
<td>Western Civilization I</td>
<td>3</td>
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<tr>
<td>HIST 252</td>
<td>Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>HIST 253</td>
<td>Texas History</td>
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*Foreign Language Sequence I: 4
*Foreign Language Sequence II: 4

## French

(16 CREDIT HOURS)

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FREN 191</td>
<td>Beginning French I</td>
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<tr>
<td>FREN 192</td>
<td>Beginning French II</td>
<td>4</td>
</tr>
<tr>
<td>FREN 291</td>
<td>Intermediate French I</td>
<td>3</td>
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<tr>
<td>FREN 292</td>
<td>Intermediate French II</td>
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<tr>
<td>FREN 293</td>
<td>Conversational French I*</td>
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<td>FREN 294</td>
<td>Conversational French II*</td>
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</table>

*Co-requisite of FREN 291

## Geography

(14-16 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 151</td>
<td>Physical Geography</td>
<td>3</td>
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<tr>
<td>GEOG 152</td>
<td>Cultural Geography</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 151</td>
<td>Cultural Anthropology</td>
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<tr>
<td>PSYC 151</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HIST 251</td>
<td>Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIST 252</td>
<td>Western Civilization II</td>
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</table>

*Foreign Language Sequence I: 4
*Foreign Language Sequence II: 4

## History

(14-16 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
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<td>Western Civilization I</td>
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<tr>
<td>HIST 252</td>
<td>Western Civilization II</td>
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<tr>
<td>HIST 253</td>
<td>Texas History</td>
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</table>

*Foreign Language Sequence I: 4
*Foreign Language Sequence II: 4

## Mathematics

(3 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 152</td>
<td>Statistics</td>
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</table>

## Psychology

(3 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 151</td>
<td>General Psychology</td>
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## Sociology

(3 CREDIT HOURS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SOC 151</td>
<td>Introduction to Sociology</td>
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</table>
### Legal Assistant

**Legal Assistant**

**14-16 credit hours**

Also see A.A.S. Legal Assistant area of study, page 69.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LEGL 130</td>
<td>Law and Judicial Systems</td>
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<tr>
<td>LEGL 132</td>
<td>Legal Research</td>
<td>3</td>
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<tr>
<td>LEGL 135</td>
<td>Law Office Management</td>
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<tr>
<td>LEGL 230</td>
<td>Civil Procedure or</td>
<td></td>
</tr>
<tr>
<td>CRJS 154</td>
<td>Courts and Criminal Procedures</td>
<td>3</td>
</tr>
<tr>
<td>OFAD 122</td>
<td>Adv. Typewriting/Legal</td>
<td>3</td>
</tr>
<tr>
<td>OFAD 223</td>
<td>Word Processing I</td>
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<tr>
<td>OFAD 224</td>
<td>Word Processing II/Legal</td>
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</tr>
<tr>
<td>OFAD 225</td>
<td>Machine Transcription/Legal</td>
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*Additional hours may be required for transfer. See the advisor.*

### Music

**Music**

**14-16 credit hours**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>Chorus</td>
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<td>Music Theory I</td>
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<td>MUS 152</td>
<td>Aural Skills I</td>
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<td>MUS 153</td>
<td>Music Theory II</td>
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<td>MUS 154</td>
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<td>MUS 155</td>
<td>Class Voice</td>
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<td>MUS 160</td>
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<td>MUS 167</td>
<td>Intro. to Synthesizer I</td>
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<td>MUS 168</td>
<td>Intro. to Synthesizer II</td>
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<td>MUS 256</td>
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### Philosophy

**Philosophy**

**14-16 credit hours**

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<td>3</td>
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<tr>
<td>PHIL 152</td>
<td>Logic</td>
<td>3</td>
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<tr>
<td>PHIL 153</td>
<td>Ethics</td>
<td>3</td>
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<tr>
<td>PHIL 154</td>
<td>Comparative Religion</td>
<td>3</td>
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<tr>
<td>PSYC 151</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>HDEV 105</td>
<td>Personal Development</td>
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### Photography

**Photography**

**14-16 credit hours**

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<td>PHO 240</td>
<td>Advanced Color Photography</td>
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<td>PHO 280</td>
<td>Portrayal</td>
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<td>PHO 281</td>
<td>Portfolio</td>
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<td>PHO 281</td>
<td>(Topics in Contemporary Photography)</td>
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<td>PHO 290</td>
<td>Photo Illustration</td>
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<td>PHO 291</td>
<td>Photojournalism</td>
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<td>PHO 298</td>
<td>History of Photography</td>
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### Political Science

**Political Science**

**14-16 credit hours**

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<td>Introduction to Political Science</td>
<td>3</td>
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<tr>
<td>PLSC 263</td>
<td>International Relations</td>
<td>3</td>
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<td>PLSC 264</td>
<td>Comparative Politics</td>
<td>3</td>
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<td>CPSC 190</td>
<td>Programming Concepts I</td>
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<td>CPSC 191</td>
<td>Programming Concepts II</td>
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<td>CRJS 152</td>
<td>Introduction to Criminal Justice</td>
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<td>Principles of Economics—Macro</td>
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<td>PHIL 152</td>
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<td>PHIL 153</td>
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**Pre-Law**

(14–16 CREDIT HOURS)

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<tr>
<td>SOC 151</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>SPCM 152</td>
<td>Public Speaking</td>
<td>3</td>
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<tr>
<td>CRJS 152</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
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<tr>
<td>LEGL 130</td>
<td>Law and Judicial Systems</td>
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<tr>
<td>LEGL 236</td>
<td>Legal Research and Writing</td>
<td>3</td>
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<tr>
<td>GEOG 151</td>
<td>Physical Geography</td>
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<tr>
<td>BSAD 121</td>
<td>Introduction to Business</td>
<td>3</td>
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<tr>
<td>PHIL 151</td>
<td>Introduction to Philosophy</td>
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<td>PHIL 152</td>
<td>Logic</td>
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<td>PHIL 153</td>
<td>Ethics</td>
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**Psychology**

(14–16 CREDIT HOURS)

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<td>Psychology of Adjustment</td>
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<td>PSYC 153</td>
<td>Human Sexuality</td>
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<tr>
<td>PSYC 251</td>
<td>Life-span Psychology</td>
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<td>PSYC 252</td>
<td>Social Psychology</td>
<td>3</td>
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<td>PSYC 253</td>
<td>Psychology of Personality</td>
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<td>PSYC 297</td>
<td>Selected Topics in Psychology</td>
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<td>SOC 151</td>
<td>Introduction to Sociology</td>
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<td>SOC 152</td>
<td>Social Problems</td>
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<td>Marriage and Family</td>
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<td>SPCM 152</td>
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**Sociology**

(14–16 CREDIT HOURS)

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<tr>
<td>SOC 152</td>
<td>Social Problems</td>
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<td>SOC 153</td>
<td>Human Sexuality</td>
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<td>SOC 251</td>
<td>Marriage and Family</td>
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<td>SOC 252</td>
<td>Social Psychology</td>
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<td>SOC 253</td>
<td>Minority Studies</td>
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<td>SOC 297</td>
<td>Selected Topics in Sociology</td>
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<td>PSYC 151</td>
<td>General Psychology</td>
<td>3</td>
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<td>PSYC 251</td>
<td>Life Span Psychology</td>
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<td>PSYC 253</td>
<td>Psychology of Personality</td>
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<td>PSYC 297</td>
<td>Selected Topics in Psychology</td>
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**Spanish**

(14–16 CREDIT HOURS)

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<td>Beginning Spanish I</td>
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<td>SPAN 192</td>
<td>Beginning Spanish II</td>
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<tr>
<td>SPAN 291</td>
<td>Intermediate Spanish I</td>
<td>3</td>
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<tr>
<td>SPAN 292</td>
<td>Intermediate Spanish II</td>
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<td>SPAN 293</td>
<td>Conversational Spanish I</td>
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<td>Conversational Spanish II</td>
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**Speech Communication**

(14–16 CREDIT HOURS)

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<td>SPCM 153</td>
<td>Advanced Public Speaking</td>
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<tr>
<td>SPCM 191</td>
<td>Argumentation and Debate</td>
<td>3</td>
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<tr>
<td>SPCM 192</td>
<td>Forensic Workshop</td>
<td>2</td>
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<tr>
<td>SPCM 193</td>
<td>Sign Language I</td>
<td>3</td>
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<tr>
<td>SPCM 194</td>
<td>Sign Language II</td>
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<td>SPCM 291</td>
<td>Oral Interpretation</td>
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<td>SPCM 292</td>
<td>Language and Communication</td>
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<td>SPCM 293</td>
<td>Business and Professional Speaking</td>
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<tr>
<td>SPCM 294</td>
<td>Interpersonal Communication</td>
<td>3</td>
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<tr>
<td>SPCM 295</td>
<td>Radio and TV Announcing</td>
<td>3</td>
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<tr>
<td>SPCM 296</td>
<td>Radio and TV News</td>
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<tr>
<td>SPCM 297</td>
<td>Selected Topics in Speech Communication</td>
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**Theatre**

(14–16 CREDIT HOURS)

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<td>Introduction to the Theatre</td>
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<tr>
<td>THEA 185</td>
<td>Stagecraft</td>
<td>3</td>
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<tr>
<td>THEA 190</td>
<td>Practicum—Performance</td>
<td>2</td>
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<tr>
<td>THEA 191</td>
<td>Practicum—Technical</td>
<td>2</td>
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<tr>
<td>THEA 192</td>
<td>Voice and Diction</td>
<td>3</td>
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<tr>
<td>THEA 193</td>
<td>Acting I</td>
<td>3</td>
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<tr>
<td>THEA 194</td>
<td>Acting II</td>
<td>3</td>
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<tr>
<td>SPCM 152</td>
<td>Public Speaking</td>
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<tr>
<td>SPCM 291</td>
<td>Oral Interpretation</td>
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<tr>
<td>SPCM 295</td>
<td>Radio and TV Announcing</td>
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ASSOCIATE OF SCIENCE DEGREE PROGRAMS

The Associate of Science degree provides general academic courses which enable students to transfer to a four-year institution of their choice. It is the student’s responsibility to choose a college or university as soon as possible and to determine the specific degree requirements of that institution. Students should consult with a CCCC advisor and the four-year institution on a regular basis to ensure enrollment in courses appropriate to the chosen major.

GENERAL EDUCATION CORE REQUIREMENTS: (CH = CREDIT HOURS)

I. ENGLISH
   6 CH ENGL 151-152 Composition/Rhetoric I & II

II. SPEECH COMMUNICATIONS
   3 CH SPCM 151 Fundamentals of Speech Communication

III. SOCIAL SCIENCES
    12 CH to include:
    6 CH HIST 151 U.S. History I and
    HIST 152 U.S. History II
    6 CH PLSC 261 American Government I and
    PLSC 262 American Government II

IV. MATHEMATICS AND NATURAL/PHYSICAL SCIENCES
    6 CH MATH 181 College Algebra
    MATH 182 Trigonometry (or higher as determined by major field of study)
    6-8 CH BIOL 191 General Biology I
    BIOL 192 General Biology II
    CHEM 191* General Chemistry I
    CHEM 192 General Chemistry II
    GEOL 191 Physical Geology
    GEOL 192 Historical Geology
    PHYS 191** General Physics I
    PHYS 192 General Physics II
* Prerequisite: college algebra
** Prerequisite: high school algebra or equivalent

V. COMPUTER LITERACY
   3 CH CPSC 150 Introduction to Computers

VI. HUMANITIES
    3 CH to include:
    3 CH HUM 151 Introduction to Humanities or
    PHIL 151 Introduction to Philosophy
    PHIL 152 Logic
    PHIL 153 Ethics
    PHIL 154 Comparative Religion

VII. BEHAVIORAL SCIENCE
    3 CH PSYC 151 General Psychology or
    SOC 151 Introduction to Sociology

VIII. HEALTH, PHYSICAL EDUCATION AND DANCE
    2 CH HPED Any activity course
GENERAL EDUCATION CORE  44–46 CREDIT HOURS

ELECTIVES (SEE PAGES 44–45)  14–16 CREDIT HOURS

TOTAL 60 CREDIT HOURS

- The general education core for the Associate of Science degree consists of 44–46 credit hours. The electives and/or major field of study consists of 14–16 credit hours. This degree requires the completion of a minimum of 60 credit hours, including at least 18 hours earned at CCCC.

- Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).

- Foreign languages—Students planning to transfer to a four-year institution should contact the transfer institution before beginning work toward the A.A. or A.S. degrees. Some colleges and universities require two years of foreign language for the completion of the bachelor’s degree.

1. Students planning to transfer to a four-year institution should check the specific degree plan requirements located in the Transfer Lab.

2. Higher levels of mathematics and science may be substituted with advisor approval.

ASSOCIATE OF SCIENCE—SUGGESTED ELECTIVES FOR AREAS OF STUDY

BIOLOGY

(14–16 CREDIT HOURS)

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<td>BIOL 264</td>
<td>Human Genetics</td>
<td>4</td>
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<tr>
<td>BIOL 281</td>
<td>General Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 283</td>
<td>Invertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 284</td>
<td>Vertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 291</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
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<td>BIOL 292</td>
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<tr>
<td>BIOL 293</td>
<td>Microbiology</td>
<td>4</td>
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<tr>
<td>BIOL 294</td>
<td>Genetics</td>
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CHEM 191  General Chemistry I ....................................... 4
CHEM 192  General Chemistry II ..................................... 4
CHEM 193  Biochemistry ............................................. 1
CHEM 291  Organic Chemistry I .................................... 4
CHEM 292  Organic Chemistry II ................................... 4
HLSC 191  General Nutrition ....................................... 3
HLSC 132  Medical Terminology .................................... 3
MATH 153  Statistics ............................................... 3

CHEMISTRY

(14–16 CREDIT HOURS)

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<td>CHEM 291</td>
<td>Organic Chemistry I</td>
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<td>CHEM 292</td>
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<td>PHYS 291</td>
<td>College Physics I</td>
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<td>MATH 293</td>
<td>Differential Equations</td>
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COMPUTER SCIENCE

(14–16 CREDIT HOURS)

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<td>MATH 290</td>
<td>Discrete Structures</td>
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<tr>
<td>MATH 292</td>
<td>Linear Algebra</td>
<td>3</td>
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<tr>
<td>CPSC 190</td>
<td>Programming Concepts I</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 191</td>
<td>Programming Concepts II</td>
<td>3</td>
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<tr>
<td>CPSC 290</td>
<td>Assembly Language</td>
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<td>CPSC 292</td>
<td>Scientific Programming</td>
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<td>C Programming</td>
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<tr>
<td>ENGL 200</td>
<td>Literature</td>
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<td>PHIL 152</td>
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EDUCATION

Suggested curriculum for elementary (interdisciplinary studies) and secondary education is located in the Transfer Lab.
**ENGINEERING** *(14-16 CREDIT HOURS)*

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<td>MATH 292</td>
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<tr>
<td>MATH 293</td>
<td>Differential Equations</td>
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<tr>
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<td>Programming Concepts I</td>
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<tr>
<td>ENGR 151</td>
<td>Engineering Graphics</td>
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<tr>
<td>ENGR 191</td>
<td>Engineering Mechanics I</td>
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<td>ENGR 192</td>
<td>Engineering Mechanics II</td>
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<tr>
<td>ENGR 291</td>
<td>Materials and Processes</td>
</tr>
<tr>
<td>ENGR 292</td>
<td>Electrical Circuit Analysis</td>
</tr>
<tr>
<td>CHEM 191</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 192</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>ENGL 291</td>
<td>Technical Writing</td>
</tr>
</tbody>
</table>

*CACC has a formal articulation agreement with the University of Texas at Dallas. Check with the CACC program coordinator or Transfer Lab for detailed information.*

**PHYSICAL EDUCATION** *(14-16 CREDIT HOURS)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 291</td>
<td>Anatomy and Physiology I</td>
</tr>
<tr>
<td>BIOL 292</td>
<td>Anatomy and Physiology II</td>
</tr>
<tr>
<td>HPED 101</td>
<td>Introduction to Physical Education</td>
</tr>
<tr>
<td>HPED 103</td>
<td>Personal Health</td>
</tr>
<tr>
<td>PSYC 151</td>
<td>General Psychology</td>
</tr>
<tr>
<td>HPED 101</td>
<td>Any Physical Education Activity Course</td>
</tr>
</tbody>
</table>

**PHYSICS** *(14-16 CREDIT HOURS)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 291</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 292</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>MATH 293</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>CPSC 190</td>
<td>Programming Concepts I</td>
</tr>
<tr>
<td>CHEM 191</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 192</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>PSCI 153</td>
<td>Elementary Astronomy</td>
</tr>
</tbody>
</table>

**HORTICULURE/LANDSCAPE TECHNOLOGY** *(14-16 CREDIT HOURS)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>BIOL 281</td>
<td>General Botany</td>
</tr>
<tr>
<td>BIOL 294</td>
<td>Genetics</td>
</tr>
<tr>
<td>HLT 117</td>
<td>Interior Plants</td>
</tr>
<tr>
<td>HLT 125</td>
<td>Soils and Plant Nutrition</td>
</tr>
<tr>
<td>HLT 126</td>
<td>Plant Pest and Controls</td>
</tr>
<tr>
<td>HLT 190</td>
<td>Basic Horticulture</td>
</tr>
<tr>
<td>HLT 191</td>
<td>Woody Plant Materials</td>
</tr>
<tr>
<td>HLT 192</td>
<td>Herbaceous Plant Materials</td>
</tr>
<tr>
<td>HLT 265</td>
<td>Plant Propagation</td>
</tr>
</tbody>
</table>

**MATHEMATICS** *(14-16 CREDIT HOURS)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENGL 291</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>MATH 291</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 292</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>MATH 293</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>CPSC 190</td>
<td>Programming Concepts I</td>
</tr>
<tr>
<td>ENGL 200</td>
<td>Literature</td>
</tr>
<tr>
<td>PHIL 152</td>
<td>Logic</td>
</tr>
</tbody>
</table>

**PRE-MEDICAL/PRE-DENTAL** *(14-16 CREDIT HOURS)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 191</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 192</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>CHEM 291</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHEM 292</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>BIOL 291</td>
<td>Anatomy and Physiology I</td>
</tr>
<tr>
<td>BIOL 292</td>
<td>Anatomy and Physiology II</td>
</tr>
<tr>
<td>BIOL 293</td>
<td>Microbiology</td>
</tr>
<tr>
<td>PHYS 291</td>
<td>College Physics I</td>
</tr>
<tr>
<td>PHYS 292</td>
<td>College Physics II</td>
</tr>
</tbody>
</table>

Note: Higher level math and/or science is generally required for students seeking a Bachelor's of Science degree in the following areas:

- Biology
- Mathematics
- Chemistry
- Physical Education
- Computer Science
- Physics
- Engineering
- Pre-medical/Pre-dental
ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAMS

The Associate of Applied Science degree is awarded after completion of a prescribed two-year program of study which prepares the student to enter and compete in the job market. The programs are also designed for individuals who are upgrading current job skills. The student should remember that the majority of credits earned in most vocational/technical programs are designed for work-place competencies and not transfer. However, some of the programs do transfer to specific four-year institutions and it is important for the student to consult with an advisor at CCCC as well as the four-year institution.

CERTIFICATE PROGRAMS

The certificate programs are designed for re-entry into the job market or the upgrading of skills. The certificate is awarded after the completion of course requirements in the area of specialization. The programs vary in length and prepare the student for immediate employment. The certificate programs follow each related Associate of Applied Science degree.

GENERAL EDUCATION CORE REQUIREMENTS: (CH = CREDIT HOURS)

I. ENGLISH
   3 CH ENGL 151 Composition/Rhetoric I

II. SPEECH
    3 CH SPCM 151 Fundamentals of Speech Communication
    SPCM 293 Business and Professional Speaking

III. MATHEMATICS
     3 CH MATH 150 Contemporary Mathematics (or higher as determined by major field of study)

IV. COMPUTER LITERACY
    3 CH CPSC 150 Introduction to Computers

V. ECONOMICS
   3 CH ECON 121 Introduction to Economics

VI. HUMANITIES
    3 CH HUM 151 Introduction to the Humanities

VII. BEHAVIORAL SCIENCE
     3 CH PSYC 121 Applied Psychology

VIII. HEALTH, PHYSICAL EDUCATION AND DANCE
      1 CH HPED Any activity course

The general education core for the Associate of Applied Science degree consists of 22 credit hours. The total number of hours required to complete an A.A.S. degree varies depending upon the field of study. A minimum of 18 credit hours must be earned at CCCC.

Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and two additional hours of electives are required. Credit for HPED courses is awarded for military training upon receipt of DD214 (Honorable Discharge).
ACCOUNTING

A two-year Associate of Applied Science degree program

61 credits hours required to graduate

About Our Program

Accounting firms, public corporations and private firms have expressed a need for two-year accounting graduates who have learned the skills needed to act as accounting paraprofessionals. The Associate of Applied Science degree in accounting was developed in response to that need. Students who participate in this program learn a variety of accounting skills related to financial accounting, managerial accounting, auditing and taxation. Furthermore, these students learn computer skills related to spreadsheet, data bases and word processing. Students also learn about the ethical and legal environments in which these skills are used.

This program is an exciting opportunity for students desiring a two-year Associate of Applied Science degree. After two years of college study, the student will be prepared for entrance into a paraprofessional accounting career.

Career Opportunities

A wide range of career options await the graduates of this program. After completing the required course work and on the job training, students select from a diversified variety of career options in the areas of:

- Internal auditing
- External auditing
- Tax return preparation
- Compilation work
- Financial statement preparation
- Special accounting projects

Articulation/Transfer Agreement

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

Associate of Applied Science Degree Requirements: Accounting

I. General Education Core (22 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ENGL 151 Composition/Rhetoric I</td>
</tr>
<tr>
<td>B. SPCM 151 Fundamentals of Speech Comm.</td>
</tr>
<tr>
<td>C. MATH 151 Pre-Calculus for Bus/Econ.</td>
</tr>
<tr>
<td>D. ECON 291 Principles of Economics I Macro</td>
</tr>
<tr>
<td>E. PSYC 121 Applied Psychology</td>
</tr>
<tr>
<td>F. HUM 151 Introduction to Humanities</td>
</tr>
<tr>
<td>G. CPSC 150 Introduction to Computers</td>
</tr>
<tr>
<td>H. HPED Elective</td>
</tr>
</tbody>
</table>

II. Technical Program Core (12 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ACCT 191 Principles of Accounting I</td>
</tr>
<tr>
<td>B. ACCT 192 Principles of Accounting II</td>
</tr>
<tr>
<td>C. ACCT 194 Intermediate Accounting I</td>
</tr>
<tr>
<td>D. ACCT 195 Intermediate Accounting II</td>
</tr>
</tbody>
</table>

III. Major Course (18 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ACCT 193 Managerial Accounting</td>
</tr>
<tr>
<td>B. ACCT 196 Auditing</td>
</tr>
<tr>
<td>C. ACCT 291 Individual Income Taxation</td>
</tr>
<tr>
<td>D. ACCT 292 Corporate Income Taxation</td>
</tr>
<tr>
<td>E. CIS 220 Integrated Spreadsheet App.</td>
</tr>
<tr>
<td>F. CIS 230 Database Applications</td>
</tr>
</tbody>
</table>

IV. Electives (9 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ACCT 700 Cooperative Education</td>
</tr>
<tr>
<td>B. ACCT 295 Accounting Ethics</td>
</tr>
<tr>
<td>C. BSAD 123 Business Law</td>
</tr>
<tr>
<td>D. QFAD 223 Word Processing I</td>
</tr>
<tr>
<td>E. ENGL 291 Technical Writing</td>
</tr>
<tr>
<td>F. CIS 235 Networking and Telecomm.</td>
</tr>
<tr>
<td>G. CIS 245 Computer Operating Systems</td>
</tr>
</tbody>
</table>

*See ENGL 291 course description.

Advertising Art (Applied Communication Design)

A two-year Associate of Applied Science degree program

70 credits hours required to graduate

About Our Program

The program in advertising art trains today's artists and designers in the communication medium of the future as
well as the present: computer-aided communication design. Students work with the state-of-the-art hardware and software, creating professional-level publishing, graphics, illustration, animation and imaging. Students also design software and human interface applications. Leading-edge industries support the program fiscally and act as a source of referral and employment for our graduates.

Apple Computer has named the CCCC Advertising Art area one of only three Apple Multimedia Regional Centers in a three-state area. The high visibility of this center will enhance CCCC graduates’ employment possibilities.

Articulation/Transfer Agreement

Articulation agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor’s degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

Associate of Applied Science Degree

Requirements: Advertising Art

I. General Education Core

(22 credit hours)

A. ENGL 151 Composition/Rhetoric I 3
B. SPCM 15 Fundamentals of Speech Comm. 3
C. MATH 150 Contemporary Mathematics 3
D. ECON 121 Intro. to Economics or 3
ECON 291 Principles of Economics * Macroeconom 3
E. PSYC 121 Applied Psychology or 1
PSYC 151 General Psychology 3
F. HUM 151 Introduction to Humanities 3
G. CPSC 150 Introduction to Computers 3
H. HPED Elective 1

II. Technical Program Core

(36 credit hours)

A. ADV 190 Survey of Advertising Art 3
B. ADV 140 Intro. to Computer Graphics 3
C. ADV 141 Creative Problem Solving 3
D. ADV 287 Visual Communications I 3
E. ADV 288 Visual Communications II 3
F. ADV 296 Adv. Computer Illustration or 3
ADV 233 Elect. Publishing for Graphic Design 3
G. ADV 294 Professional Practices 3
H. ADV 295 Ad Agency 3
I. ADV 700 Cooperative Education I 3
J. ART 191 Design I 3
K. ART 193 Drawing I 3
L. PHO 180 Photography I 3

Advertising Art offers an Associate of Applied Science degree and three certificates in Computer Graphics, Illustration and Production Art. Students receive a strong background in traditional graphics skills together with state-of-the-art training in electronic publishing, imaging, graphics, 3D modeling, animation and interactive multimedia. A student ad agency and an active internship program help to bridge the gap from formal training to full-time employment. Articulation agreements with Plano ISD, Skyline High School and East Texas State University facilitate transfer.

Students completing the two-year Commercial Art program at Plano ISD or the two-year Commercial Art Cluster at Skyline High School may be eligible to receive credit through articulation. Check “Customized Articulation Program” in this catalog.

Career Opportunities

Jobs in the Advertising Art area are varied and depend upon the business or agency specialty. Listed below are some of the career opportunities:

- production artist
- graphic designer
- art director
- illustrator
- computer graphics production artist
- computer illustrator
- multi-media director
- computer animator
- computer visualization artist
Certificate Programs

Certificate Requirements: Computer Graphics
(45 credit hours)

A. ENGL 151 Composition/Rhetoric .......... 3
B. ADV 140 Intro. to Computer Graphics .... 3
C. ADV 141 Creative Problem Solving ....... 3
D. ADV 143 Computer Typography .......... 3
E. ADV 190 Survey of Advertising Art ...... 3
     Graphic Design

I. ADV 287 Visual Communication I ......... 3
J. ADV 288 Visual Communication II OR .... 3
    ADV 290 Graphic Design and Production ..., 3
K. ADV 294 Professional Practices .......... 3
L. ADV 295 Ad Agency ........................ 3
M. ART 191 Design I .......................... 3
N. ART 193 Drawing I .......................... 3
O. ELECTIVE Select one:
   ADV 144 Intro. to Multimedia Authoring ..., 3
   ADV 232 Image Processing I ............... 3
   ADV 244 Adv. Electronic Publishing for 3
     Graphic Design
   ADV 289 Computer Illustration ............ 3
   ADV 290 Graphic Design and Production ..., 3
   ADV 291 Adv. Graphic Design and Prod. ... 3
   ADV 292 Illustration ........................ 3
   ADV 293 Advanced Illustration ............ 3
   ADV 236 2D Computer Animation ........... 3
   ADV 208 Sketching for Illustration ....... 3
   ADV 296 Adv. Computer Illustration ....... 3
   ART 194 Drawing II ......................... 3
   ART 196 Design III/Color Theory ........... 3
   ART 297 Life Drawing ....................... 3
   PHO 180 Photography I .................... 3
   PHO 181 Photography II ................... 3

Certificate: Illustration
(39 credit hours)

A. ENGL 151 Composition/Rhetoric .......... 3
B. ADV 141 Creative Problem Solving ....... 3
C. ADV 190 Survey of Advertising Art ...... 3
D. ADV 287 Visual Communications I ....... 3
E. ADV 288 Visual Communications II ...... 3
F. ADV 292 Illustration ........................ 3
G. ADV 293 Advanced Illustration .......... 3
H. ADV 294 Professional Practices ......... 3
I. ADV 295 Ad Agency ........................ 3
J. ART 191 Design I .......................... 3
K. ART 193 Drawing I .......................... 3
L. ART 194 Drawing II ........................ 3
M. ELECTIVE: Select one:
   ADV 140 Intro. to Computer Graphics .... 3
   ADV 142 Intro. to Electronic Imaging .... 3
   ADV 143 Computer Typography .......... 3
   ADV 208 Sketching for Illustration ....... 3
   ADV 231 Advertising Computer Graphics .. 3
Certificate Requirements: Photography
(45 credit hours)

- ADV 236 2D Computer Animation 3
- ADV 289 Computer Illustration 3
- ADV 290 Graphic Design and Production 3
- ART 291 Advanced Graphic Design and Production 3
- ADV 296 Adv. Computer Illustration 3
- ART 194 Drawing II 3
- ART 196 Design III/Color Theory 3
- ART 291 Painting 3
- ART 293 Watercolor I 3
- ART 297 Life Drawing 3
- MRKT 126 Fashion Design 3
- PHO 180 Photography I 3

Certificate Requirements: Production Art
(42 credit hours)

- A. ENGL 151 Composition/Rhetoric I 3
- B. ADV 140 Intro. to Computer Graphics 3
- C. ADV 141 Creative Problem Solving 3
- D. ADV 143 Computer Typography 3
- E. ADV 190 Survey of Advertising Art 3
- F. ADV 233 Electronic Publishing for Graphic Design 3
- H. ADV 287 Visual Communication I 3

I. ADV 290 Graphic Design and Production 3
J. ADV 294 Professional Practices 3
K. ADV 295 Ad Agency 3
L. ART 191 Design I 3
M. ART 193 Drawing I 3
N. ELECTIVE Select One:
  - ADV 142 Intro. to Electronic Imaging 3
  - ADV 144 Intro. to Interactive Multimedia Authoring 3
  - ADV 236 2D Computer Animation 3
  - ADV 244 Adv. Electronic Publishing 3
  - ADV 288 Visual Communication II 3
  - ADV 289 Computer Illustration 3
  - ADV 291 Adv. Graphic Design and Prod. 3
  - ADV 292 Illustration 3
  - ADV 296 Adv. Computer Illustration 3

Child Development
Early Childhood Administrator

A two-year Associate of Applied Science degree program

66-67 credit hours required to graduate

About Our Program

The degree program in Child Development with an Early Childhood Administrator major offers the students an opportunity to study administrative procedures in a variety of child care facilities. Students learn management skills which will allow them to provide quality programs in safe, nurturing environments that promote optimal growth and development of children.

The classroom learning experiences are supplemented by laboratory activities. Students receive training in observation and evaluation procedures; practice the skills necessary for planning, organizing, communicating and supervising; and learn to work cooperatively with parents and community services.

Students planning to transfer to a four-year institution should check with an academic advisor.

Note: Students completing the two-year Child Care Development program at Denton ISD, Lewisville ISD, or Plano ISD may be eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog.

Career Opportunities

The Associate of Applied Science degree in Child Development with an Early Childhood Administrator major is
designed to provide the necessary preparation to work as a
care director, director of children’s programs or educa-
tional director. The skills acquired will be directly appli-
cable in a variety of facilities including:

- child care centers
- preschool programs
- family day homes
- employer-sponsored child care
- church-sponsored child care
- hospital-sponsored child care
- before and after school programs
- community center programs
- parent and child study programs
- teacher’s aide
- director, assistant director, manager or educational
  coordinator in children’s programs

**Articulation/Transfer Agreement**

Formal articulation and/or transfer agreements have been
established allowing graduates with an Associate of Applied
Science degree to continue their education in bachelor’s
degree programs at specific four-year universities. For
detailed information contact the coordinator of the A.A.S.
program or the director of articulation and transfer programs.

**Associate of Applied Science Degree**

**Requirements: Early Childhood Administrator**

**I. General Education Core**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(22 credit hours)</td>
</tr>
<tr>
<td>A. ENGL 151 Composition/Rhetoric 1</td>
</tr>
<tr>
<td>B. SPCM 151 Fundamentals of Speech Comm</td>
</tr>
<tr>
<td>C. MATH 150 Contemporary Mathematics</td>
</tr>
<tr>
<td>D. ECON 121 Introduction to Economics or</td>
</tr>
<tr>
<td>291 Principles of Economics–Macro</td>
</tr>
<tr>
<td>E. PSYC 121 Applied Psychology or</td>
</tr>
<tr>
<td>151 General Psychology</td>
</tr>
<tr>
<td>F. HUM 151 Introduction to Humanities</td>
</tr>
<tr>
<td>G. CPSC 150 Introduction to Computers</td>
</tr>
<tr>
<td>H. HPED</td>
</tr>
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</table>

**II. Technical Program Core**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(27 credit hours)</td>
</tr>
<tr>
<td>A. CHDV 151 Early Child Dev. (0-3 yrs)</td>
</tr>
<tr>
<td>B. CHDV 152 Early Child Dev. (3-5 yrs)</td>
</tr>
<tr>
<td>C. CHDV 153 Early Childhood Programs and Services</td>
</tr>
<tr>
<td>D. CHDV 154 Nutrition, Health, and Safety</td>
</tr>
<tr>
<td>E. CHDV 157 Practicum A</td>
</tr>
<tr>
<td>F. CHDV 161 Early Childhood Fundamentals</td>
</tr>
<tr>
<td>G. CHDV 251 Child Guidance</td>
</tr>
<tr>
<td>H. CHDV 252 Child Abuse Prevention</td>
</tr>
<tr>
<td>I. CHDV 257 Parent and the Care Giver</td>
</tr>
</tbody>
</table>

**III. Major Courses**

(12 credit hours)

- A. CHDV 253 Administration of Early Childhood Programs | 3 |
- B. CHDV 254 Organization and Management of Early Childhood Program | 3 |
- C. CHDV 158 Practicum B | 3 |
- D. SBMT 121 Small Business Management | 3 |

**IV. Electives**

(minimum 6 credit hours)

- A. CHDV 155 Material and Activities in Early Childhood Development I | 4 |
- B. CHDV 156 N | 1 |
- C. CHDV 159 Infant and Toddler Education | 3 |
- D. CHDV 160 Child Development (5-12 yrs) | 3 |
- E. CHDV 255 Internship | 3 |
- F. CHDV 256 Cooperative Education | 3 |
- G. CHDV 297 Selected Topics in Child Development | 1 |

**Child Development**

**Early Childhood Educator**

A two-year Associate of Applied Science degree program.

**66-67 credit hours required to graduate.**

**About our Program**

The degree program in Child Development with a major in
Early Childhood Educator offers students an in-depth study
of children from birth to 12 years of age. A developmental
approach is emphasized which promotes optimal physical,
social, emotional and cognitive growth of children.

Supplementing the classroom learning experiences are
laboratory activities which promote observational skills and
multi-cultural, non-sexist approaches to teaching. Lab time
is also used to implement guidance techniques and parent
involvement programs.

Students planning to transfer to a four-year institution
should check with an academic advisor.

Note: Students completing the two-year Child Development
program at Denton ISD, Lewisville ISD, or Plano ISD may be
eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog.

CAREER OPPORTUNITIES

The degree program in Child Development with an Early Childhood Educator major provides practical skills for working with young children. Students will receive necessary training for employment in such areas as:

- child care centers
- preschool program
- family day homes
- employer-sponsored child care
- church-sponsored child care
- hospital-sponsored child care
- before and after school programs
- community center program
- parent and child study programs
- in-home care giver or nanny
- teacher's aide

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: EARLY CHILDHOOD EDUCATOR

I. General Education Core credit Hours
   (22 credit hours)
   A. ENGL 151 Composition/Rhetoric I .......... 3
   B. SPCM 151 Fundamentals of .................. 3
  Speech Communication
   C. MATH 150 Contemporary Mathematics ........ 3
   D. ECON 121 Introduction to Economics or ........ 3
   ECON 291 Principles of Economics—Macro ....... 3
   E. PSYC 121 Applied Psychology or .......... 3
   PSYC 151 General Psychology ................. 3
   F. HUM 151 Introduction to Humanities .......... 3
   G. CPSC 150 Introduction to Computers ........ 3
   H. HPED Elective ..................................... 1

II. Technical Program Core
    (27 credit hours)
    A. CHDV 151 Early Child Dev. (0-3 yrs) ............ 3
    B. CHDV 152 Early Child Dev. (3-5 yrs) ............ 3
    C. CHDV 153 Early childhood Programs ............ 3
    D. CHDV 154 Nutrition, Health, and Safety .......... 3
    E. CHDV 157 Practicum A ........................................ 3
    F. CHDV 161 Early Childhood Fundamentals .......... 3
    G. CHDV 251 Child Guidance .......................... 3
    H. CHDV 252 Child Abuse Prevention ................. 3
    I. CHDV 257 Parents and the Care Giver ............ 3

III. Major Courses
    (I 4 credit hours)
    A. CHDV 155 Material and Activities ............. 4
    Development I
    B. CHDV 156 Material and Activities ............. 4
    Development II
    C. CHDV 158 Practicum B ............................ 3

IV. Electives
    (minimum 6 credit hours)
    A. CHDV 154 Infant and Toddler Materials .......... 3
    and Activity Development
    B. CHDV 160 Child Development (5-12 yrs) .......... 3
    C. CHDV 255 Internship ........................................ 3
    D. CHDV 256 Cooperative Education ................. 3
    E. CHDV 297 Selected Topics in Child ............. 1
    Development
    F. CHDV 253 Administration of Early .......... 3
    Childhood Programs
    G. CHDV 254 Organization and Management of ...... 3
    Early Childhood Programs

CHILD DEVELOPMENT CERTIFICATE PROGRAMS

(33-35 CREDIT HOURS)

ABOUT OUR PROGRAMS:
The Child Development Certificate programs are one-year curriculums designed to prepare individuals for entry-level positions working with young children and their families. The course work can also be applicable as in-service training for teachers, administrators, nannies and family day home providers.

I. General EducationCore Credit Hours
   (9 credit hours)
   A. ENGL 151 Composition/Rhetoric I ................. 3
   B. SPCM 151 Fundamentals of
      Speech Communication ........................................ 3
   C. MATH 150 Contemporary Mathematics ................ 3
II. Technical Program Core
(19 credit hours)

A. CHDV 151 Early Child Dev. (0–3) or ..................3
B. CHDV 152 Early Child Dev. (3–5) ............ 3
C. CHDV 161 Early Childhood Fundamentals ........3
D. CHDV 251 Child Guidance ......................... 3
E. CHDV 154 Nutrition, Health and Safety .......... 3
F. CHDV 257 Parents and The Care Giver ........... 3
G. CHDV 157 Practicum A .......................... 3

III. Major Courses
(6–8 credit hours)

Early Childhood Administrator Majors
A. CHDV 253 Administration of ....................... 3
   Early Childhood Programs
B. CHDV 254 Organization and Management of ......3
   Early Childhood Program

Early Childhood Educator Majors
A. CHDV 155 Material and Activities Dev. I ........4
B. CHDV 156 Material and Activities Dev. II ........4

Note: Pending approval at the Texas Higher Education Coordinating Board

COMPUTER INFORMATION SYSTEMS
BUSINESS PROGRAMMING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM
64 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM
The development and use of computers in business and industry have created a need for many data processing technicians who are proficient in business programming languages as well as computer operations. Many small and medium sized businesses spend a considerable amount of money seeking qualified computer specialists who can solve business problems.

The degree program in Computer Information Systems with an emphasis in Business Programming is for the person who wants to obtain the entry-level skills and technical knowledge necessary for the demands of today's business and industry needs. Areas of study include:

- business programming — use of COBOL in a business environment is emphasized
- financial skills — accounting and economics courses are used to strengthen the background of the graduate
- management skills — information systems management, systems analysis, database management systems, applied psychology and technical writing are used to enhance effective management decisions
- technical skills — operating systems, data structures and statistics are presented to further technical competency

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES
Students in the Business Programming option program will receive basic instruction and pre-employment training for positions requiring high degrees of skill and technical knowledge. The Computer Information Systems curriculum will extend or improve the existing occupational competence of employed persons. The Business Programming option readies students to seek one of many new job opportunities, a few of which are:

- business programmer — produce new business programs and modify existing ones
- computer operator — control and monitor mainframe computer functions
- database manager — design and manage business data systems
- production analyst — maintain computer security, computer libraries, and business forms and equipment.

ARTICULATION/TRANSFER AGREEMENT
Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: COMPUTER INFORMATION SYSTEMS/BUSINESS PROGRAMMING

I. General Education Core Credit Hours
(22 credit hours)

A. ENGL 151 Composition/Rhetoric I ............ 3
B. MATH 151 Pre-Calculus for Bus./Econ. ..........3
C. CPSC 150 Introduction to Computers .......... 3
D. HUM 151 Introduction to Humanities ............3
E. PSYC 121 Applied Psychology or ................. 3
PSYC 151 General Psychology .................... 3
F. ECON 291 Principles of Macro .................. 3
   Economics II
G. SPCM 151 Fundamentals of Speech Comm. .......... 3  
H. HPED Elective ........................................ 1  

II. Technical Program Core  
(15 credit hours)  
A. CIS 130 BASIC Programming .................... 3  
B. CIS 200 COBOL I ...................................... 3  
C. CIS 222 Systems Analysis and Design ............ 3  
D. CIS 235 Networking/Telecommunications ...... 3  
E. CIS 245 Computer Operating Systems ........... 3  

III. Major Courses  
(21 credit hours)  
A. CIS 140 RPG Programming .......................... 3  
B. CIS 205 COBOL II .................................... 3  
C. CIS 224 Information Systems Mgt. ............... 3  
D. ACCT 191 Principles of Accounting I ............. 3  
E. ACCT 192 Principles of Accounting II .......... 3  
F. ENGL 291 Technical Writing* ..................... 3  
G. MATH 152 Calculus for Bus/Econ .................. 3  

*See ENGL 291 course description.  

IV. Electives  
(minimum 6 credit hours)  
A. CIS 121 Computer Graphics Systems .......... 3  
B. CIS 128 Microcomputer Concepts ................ 3  
C. CIS 210 Data Structures for Business .......... 3  
D. CIS 220 Integrated Spreadsheet App. ............ 3  
E. CIS 225 Desktop Publishing ....................... 3  
F. CIS 230 Database Applications ................... 3  
G. CIS 297 Selected Topics in CIS I ................. 3  
H. CIS 298 Selected Topics in CIS II ............... 3  
I. CIS 700 Cooperative Education I ................ 3  
J. CIS 705 Cooperative Education II ............... 3  
K. BSAD 121 Introduction of Business .............. 3  
L. CPSC 190 Programming Concepts I ............... 3  
M. CPSC 191 Programming Concepts II .............. 3  

**Computer Information Systems**  
**Computer Systems**  
A two-year Associate of Applied Science degree program  
64 credit hours required to graduate  

**About Our Program**  
The area of computer information systems is an exciting field that presents many opportunities for a student who is proficient in both applications and business programming. The skills acquired in this program will enable the student to solve problems that are encountered when working in this ever-changing and growing field. Ten certificates are offered that can be a part of this degree. After completing one or more certificates students can continue at Collin County Community College and receive an Associate of Applied Science degree.  
The degree program in Computer Information Systems is for persons who want to obtain the entry level skills and knowledge necessary for the demands of today's business and industry needs. Areas of study include:  
- microcomputer applications  
- financial skills  
- business programming  
- management skills  
- technical skills  

Students planning to transfer to a four-year institution should check with an academic advisor.  

**Career Opportunities**  
Students in the Computer Systems option program will receive basic instruction and pre-employment training for positions requiring high degrees of skill and technical knowledge. The certificates will provide the knowledge to update current job requirements. The skills acquired will be directly applicable in a variety of business and industry jobs, a few of which are:  
- manufacturing firms  
- computer centers  
- governmental agencies  
- accounting firms  
- microcomputer support firms  
- transportation industry  
- financial firms  

**Articulation/Transfer Agreement**  
Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.
COMPUTER INFORMATION SYSTEMS

MICROCOMPUTER APPLICATIONS

A two-year Associate of Applied Science degree program

64 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The development and use of computers in business and industry has created a need for many data processing technicians who are proficient in business programming languages as well as a variety of computer application packages.

The United States Office of Technology Assessment estimates that by the year 2000, 80 percent of all jobs will be computer-related.

The Associate of Applied Science degree program in Computer Information Systems with an emphasis in Microcomputer Applications accentuates the entry level technical skills necessary for the demands of today's business and industry needs. These skills are:

- business applications—fluency in the use of dBASE, Lotus 1-2-3, Symphony, word processing and desktop publishing software is emphasized
- technical skills—operating systems, data structures, networking, telecommunications and microcomputer concepts courses are used to enhance technical competency
- management skills—systems analysis and design, applied psychology and database design techniques are used to enhance effective management decisions

Note: Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES

Students in the Microcomputer Applications option will prepare for entry into the work force by experiencing practical applications and "real world" simulations using the latest in advanced software applications packages.

The degree in Computer Information Systems with a Microcomputer Applications option readies students for many new business and industry job opportunities, a few of which are:

- database: dBASE programmer—using the latest database applications programs to design and maintain business data
- PC support specialist—business problem solving using a variety of micro application packages
- micro programmer—design new programs and modify existing programs using microcomputer business languages
- PC service representative—support networking and the micro telecommunications industry

**Articulation/Transfer Agreement**

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

**Associate of Applied Science Degree Requirements: Microcomputer Applications**

<table>
<thead>
<tr>
<th>I. General Education Core</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>(22 credit hours)</td>
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<tr>
<td>A. ENGL 151 Composition/Rhetoric I</td>
<td>3</td>
</tr>
<tr>
<td>B. MATH 151 Pre-Calculus for Bus/Econ</td>
<td>3</td>
</tr>
<tr>
<td>C. CPSC 150 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>D. HUM 151 Introduction to Humanities</td>
<td>3</td>
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<tr>
<td>E. PSYC 121 Applied Psychology or</td>
<td>3</td>
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<tr>
<td>E. PSYC 151 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>F. ECON 291 Principles of Economics - Macro</td>
<td>3</td>
</tr>
<tr>
<td>G. SPCM 151 Fundamentals of Speech Comm.</td>
<td>3</td>
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<tr>
<td>H. HPED Elective</td>
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<tr>
<th>II. Technical Program Core</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>(15 credit hours)</td>
<td></td>
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<tr>
<td>A. CIS 128 Microcomputer Concepts</td>
<td>3</td>
</tr>
<tr>
<td>B. CIS 130 BASIC Programming</td>
<td>3</td>
</tr>
<tr>
<td>C. CIS 224 Information Systems Mgmt.</td>
<td>3</td>
</tr>
<tr>
<td>D. CIS 245 Computer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>E. CIS 235 Networking and Telecommunications</td>
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<tr>
<th>III. Major Courses</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>(21 credit hours)</td>
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<tr>
<td>A. CIS 121 Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>B. CIS 220 Integrated Spreadsheet Appl.</td>
<td>3</td>
</tr>
<tr>
<td>B. CIS 225 Desktop Publishing</td>
<td>2</td>
</tr>
<tr>
<td>C. CIS 230 Database Applications</td>
<td>3</td>
</tr>
<tr>
<td>E. OFAD 223 Word Processing I</td>
<td>2</td>
</tr>
<tr>
<td>F. ACCT 191 Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>G. BSAD 121 Introduction to Business</td>
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<thead>
<tr>
<th>IV. Electives</th>
<th>(minimum 6 credit hours)</th>
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<tbody>
<tr>
<td>A. CIS 140 RPC Programming</td>
<td>3</td>
</tr>
<tr>
<td>B. CIS 200 COBOL I</td>
<td>3</td>
</tr>
<tr>
<td>C. CIS 205 COBOL II</td>
<td>3</td>
</tr>
<tr>
<td>D. CIS 210 Data Structures for Business</td>
<td>3</td>
</tr>
<tr>
<td>E. CIS 222 Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>F. CIS 297 Selected Topics in CIS I</td>
<td>3</td>
</tr>
<tr>
<td>G. CIS 298 Selected Topics in CIS II</td>
<td>3</td>
</tr>
<tr>
<td>H. CIS 700 Cooperative Education I</td>
<td>3</td>
</tr>
<tr>
<td>I. CIS 705 Cooperative Education II</td>
<td>3</td>
</tr>
<tr>
<td>J. BSAD 122 Principles of Management</td>
<td>3</td>
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<tr>
<td>K. BSAD 228 Organization Behavior</td>
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**Computer Information Systems Certificate Programs**

<table>
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<tr>
<th>(12-24 credit hours)</th>
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**Certificate Requirements: BASIC Programming**

<table>
<thead>
<tr>
<th>(12 credit hours)</th>
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<tbody>
<tr>
<td>A. CIS 130 BASIC Programming</td>
</tr>
<tr>
<td>B. CIS 128 Microcomputer Concepts</td>
</tr>
<tr>
<td>C. CIS 245 Computer Operating Systems</td>
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<tr>
<td>D. CIS 222 Systems Analysis and Design</td>
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</table>

**Certificate Requirements: COBOL Programming**

<table>
<thead>
<tr>
<th>(8 credit hours)</th>
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<tbody>
<tr>
<td>A. CIS 128 Microcomputer Concepts</td>
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<tr>
<td>B. CIS 130 BASIC Programming</td>
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<tr>
<td>C. CIS 200 COBOL I</td>
</tr>
<tr>
<td>D. CIS 222 Systems Analysis and Design</td>
</tr>
<tr>
<td>E. CIS 245 Computer Operating Systems</td>
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<tr>
<td>F. CIS 205 COBOL II</td>
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</table>

**Certificate Requirements: Computer Applications**

<table>
<thead>
<tr>
<th>(24 credit hours)</th>
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<tbody>
<tr>
<td>A. CIS 128 Microcomputer Concepts</td>
</tr>
<tr>
<td>B. CIS 130 BASIC Programming</td>
</tr>
<tr>
<td>C. CIS 220 Integrated Spreadsheet App.</td>
</tr>
<tr>
<td>D. CIS 224 Info. Systems Management</td>
</tr>
<tr>
<td>E. CIS 225 Desktop Publishing</td>
</tr>
<tr>
<td>F. CIS 230 Database Applications</td>
</tr>
<tr>
<td>G. ACCT 131 Elementary Accounting I</td>
</tr>
<tr>
<td>ACCT 191 Principles of Accounting I</td>
</tr>
<tr>
<td>H. OFAD 223 Word Processing I</td>
</tr>
</tbody>
</table>
CERTIFICATE REQUIREMENTS: COMPUTER OPERATING SYSTEMS

(15 CREDIT HOURS)
A. CPSC 150 Intro. to Computers ...................... 3
B. CIS 128 Microcomputer Concepts ................. 3
C. CIS 130 BASIC Programming ..................... 3
D. CIS 222 Systems Analysis and Design .......... 3
E. CIS 245 Computer Operating Systems .......... 3

CERTIFICATE REQUIREMENTS: DATABASE APPLICATIONS

(12 CREDIT HOURS)
A. CIS 130 BASIC Programming ..................... 3
B. CIS 128 Microcomputer Concepts ................. 3
C. CIS 230 Database Applications .................. 3
D. CIS 222 Systems Analysis and Design .......... 3

CERTIFICATE REQUIREMENTS: DESKTOP PUBLISHING

(12 CREDIT HOURS)
A. CIS 121 Computer Graphics Systems ............. 3
B. CIS 128 Microcomputer Concepts ................. 3
C. CIS 225 Desktop Publishing ..................... 3
D. OFAD 223 Word Processing I ...................... 3

CERTIFICATE REQUIREMENTS: INFORMATION SYSTEMS MANAGEMENT

(24 CREDIT HOURS)
A. CIS 128 Microcomputer Concepts ................. 3
B. CIS 130 BASIC Programming ..................... 3
C. CIS 220 Integrated Spreadsheet App. .......... 3
D. CIS 224 Info. Systems Management ............. 3
E. CIS 230 Database Applications .................. 3
F. ACCT 191 Principles of Accounting I .......... 3
G. BSAD 228 Organizational Behavior ............. 3
H. OFAD 223 Word Processing I ...................... 3

CERTIFICATE REQUIREMENTS: INTEGRATED SPREADSHEETS

(12 CREDIT HOURS)
A. CIS 128 Microcomputer Concepts ................. 3
B. CIS 220 Integrated Spreadsheet App. .......... 3
C. ACCT 191 Principles of Accounting I .......... 3
D. OFAD 223 Word Processing I ...................... 3

CERTIFICATE REQUIREMENTS NETWORKING AND TELECOMMUNICATIONS

(8 CREDIT HOURS)
A. CPSC 150 Introduction to Computers .......... 3
B. CPSC 130 Basic Programming .................. 3
C. CIS 235 Networking and Telecomm.............. 3
D. CIS 245 Computer Operating Systems .......... 3
E. CIS 222 Systems Analysis and Design .......... 3
F. CIS 700 Cooperative Education I ............. 3

CERTIFICATE REQUIREMENTS: RPG PROGRAMMING

(15 CREDIT HOURS)
A. CIS 128 Microcomputer Concepts ................. 3
B. CIS 130 BASIC Programming ..................... 3
C. CIS 140 RPG Programming ....................... 3
D. CIS 245 Computer Operating Systems .......... 3
E. CIS 222 Systems Analysis and Design .......... 3

COMPUTER SCIENCE SOFTWARE DEVELOPMENT

A two-year Associate of Applied Science degree program

65 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The development and use of computers, especially microprocessors, has created a demand for software application programs. There are career opportunities in both real-time control programs and systems software development. This involves not only developing programs but correcting and updating existing software.

This degree program requires extensive hands-on programming on both microcomputers and VAX minicomputers.

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES

This program prepares entry level computer programmers for work in an applications environment. The student gains a background in basic programming concepts including software design and is exposed to present-day computer languages. Careers available for the graduate include:

- computer service technician
- computer programmer
- software development programmer
- numerical control programmer
- minicomputer programmer

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied
Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE
REQUIREMENTS: SOFTWARE DEVELOPMENT

I. General Education Core
   Credit Hours (22 credit hours)
   A. CPSC 150 Introduction to Computers ............ 3
   B. ENGL 151 Composition/Rhetoric I ............. 3
   C. HUM 151 Introduction to Humanities ............ 3
   D. MATH 181 College Algebra ....................... 3
   E. PSYC 151 Introduction to Psychology .......... 3
   F. SPCM 151 Fundamentals of Speech Comm. ........ 3
   G. ECON 291 Principles of Economics - Macro .... 3
   H. HPED Elective .................................. 1

II. Technical Program Core
    (10 credit hours)
    A. EET 150 AC/DC Fundamentals .................. 4
    B. ENGL 291 Technical Writing* ................. 3
    C. MATH 182 Trigonometry ......................... 3

   *See ENGL 291 course description.

III. Major Courses
     (30 credit hours)
     A. CPSC 123 Intro. to System Software .......... 3
     B. CPSC 190 Programming Concepts I ............ 3
     C. CPSC 191 Programming Concepts II ............ 3
     D. CPSC 221 Software Engineering ................ 3
     E. CPSC 223 Real Time Programming ............. 3
     F. CPSC 224 Software Test Techniques .......... 3
     G. CPSC 225 ADA Programming ..................... 3
     H. CPSC 290 Assembly Language .................. 3
     I. CPSC 292 Scientific Programming ............. 3
     J. CPSC 135 C Programming ........................ 3

IV. Elective
    (3 credit hours)
    A. CPSC 232 Adv. Software Engineering ......... 3
    B. CPSC 233 Adv. Assembly Language ............. 3
    C. CPSC 235 LISP Programming .................... 3
    D. CPSC 236 Introduction to Artificial Intelligence
    E. CIS 121 Computer Graphics Systems .......... 3
    F. CIS 235 Networking and Telecommunication .. 3

EATING DISORDERS COUNSELOR
A ONE-YEAR CERTIFICATE PROGRAM

31 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM
To meet the increasing demand for certification of professionals in the area of eating disorders counselors, the Certificate for Eating Disorders Counselor has been developed to educate students in all areas of the disorders. The certificate program is appropriate for retraining of psychologists, therapists, counselors and social workers as well as serving as a foundation for students beginning their education in these fields.

The certificate provides state-of-the-art training in assessment, symptoms, treatment modalities, medical aspects, individual and group counseling and nutrition. It also incorporates an experiential component in treatment facilities. The program is approved by the International Association of Eating Disorders Professionals which is the credentialing agency. CCCC is currently the only college in Texas offering the certificate.

CCCC's program has established, adopted and promoted a uniform curriculum of the highest possible education and training standards for eating disorders counselors. The health care professional provides eating disorders counseling services within the limitations of applicable state and local statutes and adheres to the ethical principles of the International Association of Eating Disorders Professionals.

Students planning to transfer to a four-year institution should check with the coordinator of the program.

CAREER OPPORTUNITIES
Certified eating disorder counselors can expect excellent job opportunities. Recent studies in Collin County and the nation emphasize the need for counselors certified in the specialized area of eating disorders. This certificate program is recognized across the United States as well as in Texas.

Counselors can obtain positions in:
- hospitals
- private agencies
- private practice
- community agencies
- private industry
**Certificate Requirements: Eating Disorders Counselor**

I. General Education Core  
(7 credit hours)
- A. ENGL 151 Composition/Rhetoric 1  
- B. PSYC 151 General Psychology  
- C. HPED Activities Course  
  Selected from the following:
  - HPED 130 Aerobic Dance  
  - HPED 140 Beginning Weight Training and Conditioning  
  - HPED 143 Beginning Jogging and Fitness  
  - HPED 146 Cycling  
  - HPED 148 Cross Training  
  - HPED 160 Swimming

II. Technical Program Core  
(6 credit hours)
- A. PSYC 251 Life-span Psychology  
- B. HLSC 191 Nutrition

III. Major Courses  
(18 credit hours)
- A. EDCC 221 A Survey of Eating Disorders  
- B. EDCC 224 Individual Counseling  
- C. EDCC 222 Treatment Modalities of Eating Disorders  
- D. EDCC 225 Group Processes  
- E. EDCC 223 Medical Aspects of Eating Disorders  
- F. EDCC 226 Practiceum

**Electronics Technology**  
A two-year Associate of Applied Science Degree Program  
71 - 72 credit hours required to graduate

**About Our Program**
Graduates of this degree program will receive training in several diversified areas of modern electronics. The student will be exposed to a combination of classroom theory and hands-on laboratory experiments that will provide entry level skills for the electronics industry. Maintenance, repair, basic equipment calibration and trouble-shooting techniques are emphasized.

Program curriculum and laboratory experiments have been formally evaluated and endorsed by an advisory committee consisting of members of the electronics industry.

Articulation agreements with four-year institutions allow students to complete this program to transfer credit toward a bachelor's degree.

Students planning to transfer to a four-year institution should check with an academic advisor.

COC is a member of the Texas Association of schools of Engineering Technology and certified as a testing center for the Certified Electronic Technician Exam.

**Career Opportunities**
Trained electronics technicians are in demand in Texas and nationwide. According to "Jobs 1995," a Texas Employment Commission publication, Texas will require approximately 2,000 electronics technicians each year through 1995.

Students completing this program will receive quality training that will provide skills that may lead to employment in specific areas such as:
- telecommunications
- computer maintenance
- avionics
- biomedical
- automotive electronics
- marine electronics

**Articulation/Transfer Agreement**
Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the AAS program or the director of articulation and transfer programs.

**Associate of Applied Science Degree Requirements: Electronics Technology**

I. General Education Core  
(9 credit hours)
- A. ENGL 151 Composition/Rhetoric 1  
- B. MATH 181 College Algebra  
- C. SPCM 151 Fundamentals of Speech  
- D. ECON 121 Introduction to Economics  
- E. PSYC 121 Applied Psychology  
- F. HUM 151 Introduction to Humanities  
- G. HPED Elective

II. Technical Program Core  
(12 credit hours)
- A. CAD 151 Technical Graphics I
**ELECTRONICS ENGINEERING TECHNOLOGY**

*A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM*

67 CREDIT HOURS REQUIRED TO GRADUATE

**ABOUT OUR PROGRAM**

Graduates of this degree program will receive training in several diversified areas of electronics. The emphasis of this program will be the application of mathematical theorems and applied physics toward the design and analysis of electronic circuits. Students will be exposed to a combination of classroom theory and hands-on laboratory design and analysis experiments. This training will provide the student with entry level skills for employment in the electronics industry.

Program curriculum and the design/analysis laboratory experiments have been formally evaluated and endorsed by an electronics industry advisory committee.

Articulation agreements with four-year institutions allow students graduating from this program to transfer credit toward a bachelor’s degree. Students planning to transfer to a four-year institution should check with an academic advisor.

CCCC is a member of the Texas Association of Schools of Engineering Technology and certified as a testing center for the Certified Electronic Technician exam.

**CAREER OPPORTUNITIES**

Trained electronic technicians are in demand in Texas and nationwide. According to “Jobs 1995,” a Texas Employment Commission publication, Texas will require approximately 2,000 electronics technicians each year through 1995.

A severe shortage of trained electronics design/analysis technicians has led to excellent employment opportunities for students completing this program. These positions are:

- engineering aides
- research and development technicians
- applied engineering technicians

Graduates of this program will receive quality training that will provide skills that may lead to employment in specific areas such as:

- telecommunications
- computer systems applications
- avionics and space communications

## ELECTRONIC TECHNOLOGY CERTIFICATE PROGRAM

| CREDIT HOURS | A. ELT 111 Basic Electronics I | 4 |
| B. ELT 112 Basic Electronics II | 4 |
| C. ELT 113 Electronic Fabrication I | 4 |
| D. ELT 114 Solid State Devices | 4 |
| E. ELT 115 Basic Digital | 3 |
| F. ELT 207 Fund of Electronic Comm | 4 |
| G. ELT 208 Active Devices | 4 |
| H. ELT 209 Instrumentation and Telemetry | 3 |

*Higher mathematics and physics courses may be used.

**SPCM 293 (Business and Professional Speaking) may be substituted for SPCM 151.

***See ENGL 291 course description.**

A certificate in Electronic Technology will be granted after completion of the major program core and the Associate of Applied Science Degree in Electronic Technology.
• biomedical applications and design
• printed circuit board design and manufacturing
• laser and fiber optics applications

Articulation/Transfer Agreement

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor’s degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

Associate of Applied Science Degree Requirements: Electronics Engineering Technology

I. General Education Core Credit Hours
(19 credit hours)

A. ENGL 151 Composition/Rhetoric I .......... 3
B. MATH 181 College Algebra* .................. 3
C. SPCM 151 Fundamentals of Speech Comm.** ...3
D. ECON 121 Introduction to Economics ............ 3
E. PSYC 121 Applied Psychology .................... 3
F. HUM 151 Introduction to Humanities ............. 3
G. HPED Elective ........................................... 1

II. Technical Program Core
(12 credit hours)

A. PHYS 191 General Physics I* .................. 4
B. PHYS 192 General Physics II* .................. 4
C. MATH 182 Trigonometry ......................... 4

III. Major Program Core
(38 credit hours)

A. EET 150 AC/DC Fundamentals .................. 4
B. EET 151 Circuit Analysis I ..................... 4
C. EET 152 Circuit Analysis II ..................... 4
D. EET 153 Digital I.C. Analysis .................. 4
E. EET 154 Fundamentals of Computers .......... 4
F. EET 250 Circuit Analysis III ................... 4
G. EET 251 Computer Interfacing ................. 3
H. CIS 121 Computer Graphics Systems .......... 3

III. Electives
(7–8 credit hours)

A. EET 252 Computer Maintenance ............. 4
B. EET 253 Microwave Fundamentals .......... 4
C. EET 254 Telecommunications .................. 4
D. EET 290 Selected Topics ....................... 3
E. EET 291 Independent Study ..................... 3
F. EET 700 Cooperative Education I .......... 4

G. EET 705 Cooperative Education II ........ 4

*Higher level physics and mathematics courses may be used.
**SPCM 293 (Business and Professional Speaking) may be substituted for SPCM 151.

Electronics Engineering Technology Certificate Programs

(22–23 credit hours)

Certificate Requirements: Computer Option
(22 credit hours)

A. EET 154 Fund. of Computers ................. 4
B. EET 251 Computer Interfacing ............... 3
C. EET 252 Computer Maintenance ............. 4
D. ELT 213 Computer Architecture ............. 4
E. ELT 214 Computer Programming ............. 4
F. ELT 215 Microcomputer Systems .......... 3

This certificate may only be earned after completion of this Electronics Engineering Technology degree.

Certificate Requirements: Electronic Communication Option
(23 credit hours)

A. ELT 207 Fundamentals of Elec. C o r n ....... 4
B. ELT 211 Power Supply Systems ............... 3
C. ELT 212 Applied Electronic Circuits .......... 4
D. ELT 214 Optoelectronics ....................... 4
E. EET 253 Microwave Fundamentals .......... 4
F. EET 254 Telecommunications .................. 4

This certificate may only be earned after completion of this Electronics Engineering Technology degree.
EMERGENCY MEDICAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

Society has become so accustomed to the availability of emergency medical services that citizens are often unaware of the impact these services have on our everyday lives. In the past, emergencies, whether minor injuries or life-threatening situations, had to be handled by family members or friends without the benefit of education in emergency medical procedures. Advanced technology and education now provide a viable and reliable emergency medical services alternative.

CCCC's degree program in Emergency Medical Services establishes an excellent foundation for work in the field of emergency medicine. After completion of the program, a student qualifies to test for certification as an EMT or EMT/Paramedic.

Logic, reason, curiosity, creativity and a desire to aid in the care and treatment of people in need are requirements for someone desiring to achieve certification in Emergency Medical Services.

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES

Students certified as Emergency Medical Technicians may find employment opportunities with paramedics, fire departments, private ambulance services, or certain hospital emergency rooms. Certified technicians may find rewarding careers such as those listed below:

- paramedic
- EMT
- emergency room assistants
- firefighter
- private ambulance service
- lab technician

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE

REQUIREMENTS: EMERGENCY MEDICAL SERVICES

I. General Education Core Credit Hours

(22 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ECON 121</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td>B. ENGL 151</td>
<td>Composition/Rhetoric I</td>
<td>3</td>
</tr>
<tr>
<td>C. HUM 151</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>D. MATH 150</td>
<td>Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>E. PSYC 121</td>
<td>Applied Psychology</td>
<td>3</td>
</tr>
<tr>
<td>F. SPCM 151</td>
<td>Fundamentals of Speech Comm.</td>
<td>3</td>
</tr>
<tr>
<td>G. CPSC 150</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>H. HPED 140</td>
<td>Beginning Weight Training</td>
<td>1</td>
</tr>
</tbody>
</table>

II. Major Courses

(41 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. EMTP 121</td>
<td>Introduction to Emergency Care</td>
<td>3</td>
</tr>
<tr>
<td>B. EMTP 141</td>
<td>Emergency Medical Procedures</td>
<td>5</td>
</tr>
<tr>
<td>C. EMTP 211</td>
<td>Selected Skills Training</td>
<td>5</td>
</tr>
<tr>
<td>D. EMTP 221</td>
<td>Paramedic Procedures I</td>
<td>3</td>
</tr>
<tr>
<td>E. EMTP 225</td>
<td>Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>F. EMTP 231</td>
<td>Paramedic Procedures II</td>
<td>7</td>
</tr>
<tr>
<td>G. HLSC 132</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>H. BIOL 291</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>I. BIOL 292</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>J. PLSC 261</td>
<td>American Government I</td>
<td>3</td>
</tr>
</tbody>
</table>

III. Electives

(3 credit hours minimum)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. EMTP 149</td>
<td>Emergency Medical Dispatch</td>
<td>3</td>
</tr>
<tr>
<td>B. EMTP 230</td>
<td>Emergency Medical Services</td>
<td>3</td>
</tr>
<tr>
<td>C. EMTP 296</td>
<td>Emergency Med Tech Seminar</td>
<td>1</td>
</tr>
<tr>
<td>D. BIOL 293</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>E. SPAN 191</td>
<td>Beginning Spanish I</td>
<td>4</td>
</tr>
<tr>
<td>F. HPED 160</td>
<td>Beginning Swimming</td>
<td>1</td>
</tr>
<tr>
<td>G. HPED 161</td>
<td>Intermediate Swimming</td>
<td>1</td>
</tr>
<tr>
<td>H. HPED 163</td>
<td>Advanced Lifesaving</td>
<td>1</td>
</tr>
<tr>
<td>I. HPED 164</td>
<td>Water Safety Instructor</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Special admission applies to this program and registration is by permission only. See coordinator/advisor for additional information.

'Student placement in mathematics is based on the results of tests and subjects completed before admission.
ENGINEERING TECHNOLOGY
Drafting and Computer-Aided Design

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62–63 CREDIT HOURS REQUIRED TO GRADUATE.

ABOUT OUR PROGRAM

High-tech industries are constantly creating new career opportunities in exciting, highly specialized fields. The degree in Engineering Technology with a major in Drafting and Design provides both an educational foundation in computer-aided design and insight into current industry practices. Students in CCCC’s intensive computer aided design (CAD) hands-on training program are taught the skills the designer, draftsman, architect, or engineer needs for successful CAD operations.

Students planning to transfer to a four-year institution should check with an academic advisor.

Note: Students completing the two-year Industrial Arts program at Lewisville ISD, McKinney ISD, or Plano ISD may be eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog.

CAREER OPPORTUNITIES

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to drafting and design exist in such industries as:

- manufacturing firms
- research organizations
- aircraft industry
- governmental agencies
- computer centers
- architectural firms

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor’s degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE

REQUIREMENTS DRAFTING AND COMPUTER-AIDED DESIGN

I. General Education Core  Credit Hours
(19 credit hours)
A. ENGL 151 Composition/Rhetoric I  3
B. MATH 181 College Algebra  3
C. SPCH 151 Fundamentals of Speech  3
D. ECON 121 Introduction to Economics  3
E. PSYC 121 Applied Psychology  3
F. HUM 151 Introduction to Humanities  3
G. HPED 2 Elective  1

II. Technical Program Core
(14 credit hours)
A. PHYS 191 General Physics I  4
B. PHYS 122 General Physics II  4
C. EET 150 AC/DC Fundamentals  3
D. MATH 182 Trigonometry  3

III. Major Courses
(21 credit hours)
A. CAD 151 Technical Graphics I  3
B. CAD 152 Technical Graphics II  3
C. CAD 153 Computer Aided Drafting  3
D. CAD 224 Adv. Computer Aided Drafting  3
E. CAD 231 Electronic PCB Drafting  3
F. CAD 235 Manufacturing Processes  3
G. CIS 121 Computer Graphics Systems  3

IV. Electives
(8–9 credit hours)
A. CAD 220 Technical Illustration  3
B. CAD 221 Computer Aided Design  3
C. CAD 232 Descriptive Geometry  3
D. CAD 236 NC Programming  3
E. CAD 237 Computer Integrated Mfg.  3
F. CAD 240 Printed Circuit Design  3
G. CAD 243 Adv. Printed Circuit Design  3
H. CAD 255 Appl. in PCB Design  3
I. CAD 700 Cooperative Education I  4
J. CAD 705 Cooperative Education II  4
K. CAD 710 Cooperative Education III  4
L. CPSC 231 Adv. Topics-Autolisp Prog.  3.
Never before has the demand for printed circuit board designers been so great. The degree in Engineering Technology with a major in Drafting and Design—Electronic Design Option provides both an educational foundation in computer-aided printed circuit board (PCB) design and insight into current industry practices. Students in the intensive computer-aided design (CAD) program are taught the skills the designer of PCBs needs to seek high-tech career opportunities in this rapidly growing and ever-changing field.

Students planning to transfer to a four-year institution should check with an academic advisor.

Note: Students completing the two-year Industrial Arts program at Lewisville ISD, McKinney ISD, or Plano ISD may be eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog.

CAREER OPPORTUNITIES

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to PCB design exist in the following industries:

- aerospace
- telecommunications
- digital switching
- electronics
- computer centers
- research organizations
- aircraft industry
- biomedical

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN—ELECTRONIC DESIGN OPTION

I. General Education Core Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ENGL 151</td>
<td>Composition/Rhetoric I</td>
<td>3</td>
</tr>
<tr>
<td>B. MATH 181</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>C. SPCM 151</td>
<td>Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>D. HUM 151</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>E. PSYC 121</td>
<td>Applied Psychology</td>
<td>3</td>
</tr>
<tr>
<td>F. HPED</td>
<td>Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

II. Technical Program Core Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. EET 151</td>
<td>Circuit Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>B. EET 152</td>
<td>Circuit Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>C. ELT 210</td>
<td>Digital Control Applications</td>
<td>3</td>
</tr>
<tr>
<td>D. ELT 208</td>
<td>Active Devices</td>
<td>4</td>
</tr>
<tr>
<td>E. MATH 182</td>
<td>Trigonometry</td>
<td>3</td>
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III. Major Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. CAD 151</td>
<td>Technical Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>B. CAD 152</td>
<td>Technical Graphics II</td>
<td>3</td>
</tr>
<tr>
<td>C. CAD 153</td>
<td>Computer Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>D. CAD 224</td>
<td>Adv. Computer Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>E. CAD 231</td>
<td>Electronic PCB Drafting</td>
<td>3</td>
</tr>
<tr>
<td>F. CAD 240</td>
<td>Printed Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>G. CAD 243</td>
<td>Adv. Printed Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>H. CIS 121</td>
<td>Computer Graphics Systems</td>
<td>3</td>
</tr>
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</table>

VI. Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. CAD 220</td>
<td>Technical Illustration</td>
<td>3</td>
</tr>
<tr>
<td>B. CAD 221</td>
<td>Computer Aided Design</td>
<td>3</td>
</tr>
<tr>
<td>C. CAD 232</td>
<td>Descriptive Geometry</td>
<td>3</td>
</tr>
<tr>
<td>D. CAD 235</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>E. CAD 236</td>
<td>NC Programming</td>
<td>3</td>
</tr>
<tr>
<td>F. CAD 237</td>
<td>Computer Integrated Mfg</td>
<td>3</td>
</tr>
<tr>
<td>G. CAD 255</td>
<td>Applications in PCB Design</td>
<td>3</td>
</tr>
<tr>
<td>H. CAD 700</td>
<td>Cooperative Education I</td>
<td>4</td>
</tr>
<tr>
<td>I. CAD 705</td>
<td>Cooperative Education II</td>
<td>4</td>
</tr>
<tr>
<td>J. CAD 710</td>
<td>Cooperative Education III</td>
<td>4</td>
</tr>
<tr>
<td>K. CPSC 231</td>
<td>Adv. Topics-Autolisp Prog</td>
<td>3</td>
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</tbody>
</table>
ENGINEERING TECHNOLOGY

DRAFTING AND COMPUTER AIDED DESIGN—MANUFACTURING OPTION

A two-year associate of applied science degree program

72 credit hours required to graduate

ABOUT OUR PROGRAM

An emerging new field in computer integrated manufacturing is rapidly gaining a place in the manufacturing industry. The degree in Engineering Technology with a major in Drafting and Design—Manufacturing Option provides both an educational foundation in computer integrated manufacturing and an insight into current industry practices. Students in the intensive Computer Aided Design (CAD) program are taught the skills the CAD/CAM technician needs to seek high-tech career opportunities in this rapidly growing field.

Students planning to transfer to a four-year institution should check with an academic advisor.

Note: Students completing the two-year Industrial Arts program at Lewisville ISD, McKinney ISD, or Plano ISD may be eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog

CAREER OPPORTUNITIES

Students receiving and Associate of Applied Science degree in Engineering Technology with an emphasis in Drafting and Computer Aided Design Manufacturing can seek careers in:

- manufacturing
- research
- aerospace
- aircraft industries
- electronics industries

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE

REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN—MANUFACTURING OPTION

I. General Education Core

   (22 credit hours)
   
   A. ENGL 151 Composition/Rhetoric I ........ 3
   B. MATH 181 College Algebra .................. 3
   C. SPCM 151 Fundamentals of Speech Comm.....3
   D. ECON 121 Introduction to Economics .......3
   E. HUM 151 Introduction to Humanities .......3
   F. PSYC 121 Applied Psychology ...............3
   G. HED Elective ................................ 1

II. Technical Program Core

   (14 credit hours)
   
   A. PHYS 191 General Physics I .............. 4
   B. PHYS 192 General Physics II .............. 4
   C. EET 150 AC/DC Fundamentals ..............3
   D. MATH 182 Trigonometry .................... 3

III. Major Courses

   (24 credit hours)
   
   A. CAD 151 Technical Graphics I ............ 3
   B. CAD 152 Technical Graphics II ............ 3
   C. CAD 153 Computer Aided Drafting ........ 3
   D. CAD 224 Adv. Computer Aided Drafting ...3
   E. CAD 235 Manufacturing Processes ........ 3
   F. CAD 236 NC Programming .................. 3
   G. CAD 237 Computer Integrated Mfg..........3
   H. CIS 121 Computer Graphics Systems ........3

IV. Electives

   (12 credit hours)
   
   A. CAD 220 Technical Illustration ........... 3
   B. CAD 221 Computer Aided Design .......... 3
   C. CAD 231 Electronic PCB Drafting .......... 3
   D. CAD 232 Descriptive Geometry ............ 3
   E. CAD 240 Printed Circuit Design ........... 3
   F. CAD 243 Adv. Printed Circuit Design .... 3
   G. CAD 255 Appl in PCB Design ...............3
   H. CAD 700 Cooperative Education I ..........4
   I. CAD 705 Cooperative Education II ........4
   J. CAD 710 Cooperative Education III ...... 4
   K. CPSC 231 Adv. Topics—Autolisp Prog .... 3
ENGINEERING TECHNOLOGY
DRAFTING AND COMPUTER AIDED DESIGN — CERTIFICATE PROGRAMS

(30–39 CREDIT HOURS)

CERTIFICATE REQUIREMENTS: DRAFTING AND COMPUTER AIDED DESIGN

(30 CREDIT HOURS)
A. CPSC 231 Adv. Topics-Autolisp Prog. ............... 3
B. CAD 151 Technical Graphics I .................. 3
C. CAD 152 Technical Graphics II .................. 3
D. CAD 153 Computer Aided Drafting ............... 3
E. CAD 220 Technical Illustration .................. 3
F. CAD 221 Computer Aided Design ............... 3
G. CAD 224 Adv. Computer Aided Drafting .......... 3
H. CAD 231 Electronic PCB Drafting ............... 3
I. CAD 235 Manufacturing Processes ............... 3
J. CIS 121 Computer Graphics Systems .......... 3

CERTIFICATE REQUIREMENTS: ELECTRONIC DESIGN

(39 CREDIT HOURS)
A. EET 151 Circuit Analysis I ..................... 4
B. EET 152 Circuit Analysis II .................... 4
C. ELT 210 Digital Control Appl .................... 3
D. ELT 208 Active Devices ......................... 4
E. CIS 121 Computer Graphics Systems .......... 3
F. CAD 151 Technical Graphics I .................. 3
G. CAD 152 Technical Graphics II .................. 3
H. CAD 153 Computer Aided Drafting ............... 3
I. CAD 224 Adv. Computer Aided Drafting .......... 3
J. CAD 231 Electronic PCB Drafting ............... 3
K. CAD 240 Printed Circuit Design ............... 3
L. CAD 243 Adv. Printed Circuit Design ........... 3

CERTIFICATE REQUIREMENTS: MANUFACTURING DESIGN

(30 CREDIT HOURS)
A. CPSC 231 Adv. Topics-Autolisp Prog. ............... 3
B. CIS 121 Computer Graphics System .......... 3
C. CAD 151 Technical Graphics I .................. 3
D. CAD 152 Technical Graphics II .................. 3
E. CAD 153 Computer Aided Drafting ............... 3
F. CAD 221 Computer Aided Design ............... 3
G. CAD 224 Adv. Computer Aided Drafting .......... 3
H. CAD 235 Manufacturing Processes ............... 3
I. CAD 236 NC Programming ......................... 3
J. CAD 237 Computer Integrated Mfg. ............... 3

FIRE SCIENCE
A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

66 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The firefighter with a well-balanced educational background will be better prepared to serve and protect the community. The Collin County Community College Associate of Applied Science degree in Fire Science is designed to give a broad perspective on various facets of providing fire protection. The program is applicable for students wishing to enter the fire service and for persons already employed as firefighters or in related career fields. Students will learn technical knowledge needed to combat the fire problems created in modern living.

The Basic Firefighter Certificate is designed to prepare the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. Students enrolled in the Basic Firefighter Certification Program are involved in various hands-on exercises including rescue practices and live fire training.

CACC’s courses are scheduled to accommodate traditional firefighter work shifts. Firemen enrolled in fire science courses offered as a part of CACC’s fire science curriculum are exempt from payment of tuition and laboratory fees.

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES

Today’s fire protection responsibilities provide new and exciting challenges in both the public and private sectors. Students enrolled in the Fire Science program prepare for occupations involving fire suppression, investigation, prevention and education. These challenging job opportunities include:

- firefighter
- fire department officer
- municipal emergency administrator
- safety technician
- hazardous material team member
- fire equipment sales and service representative
- industrial fire protection technician

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied
Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

**ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS FIRE SCIENCE**

I. General Education Core  
Credit Hours  
(32 credit hours)

A. ECON 121 Introduction to Economics .................. 3  
B. ENGL 151 Composition/Rhetoric I ............... 3  
C. HUMED 140 Beginning Weight Training and Conditioning .... 1  
D. HUM 151 Introduction to Humanities ......... 3  
E. MATH 150 Contemporary Mathematics ....... 3  
F. PSYC 121 Applied Psychology .......... 3  
G. SPCM 151 Fundamentals of Speech Comm. .... 3  
H. CPSC 150 Introduction to Computers .......... 3  
I. CHEM 151 Introduction to Chemistry ........... 4  
J. ENGL 291 Technical Writing* ............ 3  
K. PLSC 261 American Government I ....... 3

*See ENGL 291 course description.

II. Technical Program Core  
(18 credit hours)

A. FISC 106 Fund. of Fire Protection ............... 3  
B. FISC 116 Fire Safety Education .......... 3  
C. FISC 117 Fire Protection Systems ......... 3  
D. FISC 121 Industrial Fire Protection I .......... 3  
E. FISC 131 Building Codes and Construction .... 3  
F. FISC Fire Commission Approved ............. 3  
Course(s) to total 3 credit hours*  

III. Major Courses  
(16 credit hours)

Basic Firefighter Courses

A. FISC 135 Firefighter Certification I .......... 3  
B. FISC 136 Firefighter Certification II .... 2  
C. FISC 137 Firefighter Certification III .... 2  
D. FISC 138 Firefighter Certification IV .... 2  
E. FISC 139 Firefighter Certification V .... 3  
F. FISC 140 Firefighter Certification VI ...... 1  
G. EMTP 121 Intro. to Emergency Care .......... 3

OR

Fire Commission Approved Courses

A. FISC 112 Fire Prevention ..................... 3  
B. FISC 125 Chemistry of Hazardous Materials I .... 3  
C. FISC 133 Fire Cause and Determination .......... 3

D. FISC 141 Fire Administration I .......... 3  
E. FISC 148 Firefighting Tactics .......... 4  
F. FISC 225 Chemistry of Hazardous Materials II 3  
G. FISC 229 Methods of Fire Service Inst. ........ 3  
H. FISC 230 Fire Science Computer Appl. ........ 3  
I. FISC 240 Introduction to CAMEO .......... 3  
J. FISC 241 Fire Administration II ........ 3  
K. FISC 296 Seminar ..................... 1

Note: Special admission criteria applies to Basic Firefighter certificate program option. See coordinator/advisor for additional information.

**FIRE SCIENCE CERTIFICATE PROGRAM**

**Certificate Requirements: Basic Firefighter**  
(16 credit hours)

A. FISC 135 Firefighter Certification I .......... 3  
B. FISC 136 Firefighter Certification II .... 2  
C. FISC 137 Firefighter Certification III .... 2  
D. FISC 138 Firefighter Certification IV .... 2  
E. FISC 139 Firefighter Certification V .... 3  
F. FISC 140 Firefighter Certification VI ...... 1  
G. EMTP 121 Intro. to Emergency Care .......... 3

**HORTICULTURE/LANDSCAPE TECHNOLOGY**  
A two-year ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM  

64–68 CREDIT HOURS REQUIRED TO GRADUATE

**About Our Program**

Challenging careers for the 1990s and beyond may be found in the nursery and landscape industry. The degree programs in Horticulture and Landscape Technology are designed to prepare the student for immediate employment in the landscape or horticulture field. Students who are currently in the field can update their knowledge and skills in the areas of landscape installation, maintenance and many horticultural specialties.

An excellent instructional staff, small class size and laboratory experiences give Horticulture and Landscape Technology students a personalized, high quality educational experience.

Students planning to transfer to a four-year institution should check with an academic advisor.
CAREER OPPORTUNITIES

The field of landscape and horticulture is changing at a tremendous rate. Public awareness of the value of landscapes and gardens and increasing technical sophistication is contributing to the need for trained people in this area.
Some of the opportunities for employment are:

- grounds supervision
- landscape contracting and maintenance
- landscape supplies and plant sales
- plant propagation
- nursery ownership and management
- landscape management
- greenhouse production
- tree maintenance

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE
REQUIREMENTS: HORTICULTURE TECHNOLOGY

I. General Education Core Credit Hours

(27 credit hours)

A. ENGL 151 Composition/Rhetoric I ....................... 3
B. BIOL 191 General Biology I ............................... 4
C. HUM 151 Introduction to Humanities ................... 3
D. MATH 150 Contemporary Mathematics ................. 3
E. CPSC 150 Introduction to Computers .................... 3
F. ECON 121 Introduction to Economics .................. 3
G. SPCM 151 Fundamentals of Speech Comm. ................. 3
H. BIOL 294 Genetics or ........................................ 4
BIOL 281 General Botany .................................. 4
I. HPED Elective ............................................. 1

II. Technical Program Core Credit Hours

(34 credit hours)

A. HLT 117 Interior Plants .................................. 3
B. HLT 125 Soils and Plant Nutrition .................... 3
C. HLT 126 Plant Pests and Controls ..................... 3
D. HLT 190 Basic Horticulture ............................... 3
E. HLT 191 Woody Plant Materials ......................... 4
F. HLT 192 Herbaceous Plant Materials .................. 4
G. HLT 210 Intro. to Landscape Design .................. 3
H. HLT 250 Nursery and Greenhouse Prod. ............... 3
I. HLT 265 Plant Propagation ................................ 4
J. HLT 290 Field Training I ................................ 3
K. HLT 296 Seminar ........................................... 1

III. Electives

(6 credit hours)

A. HLT 115 Native Plants of Texas ......................... 3
B. HLT 140 Turf Science and Management ................. 3
C. HLT 211 Home Landscape Design ....................... 4
D. HLT 220 Irrigation Systems ............................ 3
E. HLT 275 Floriculture ..................................... 3
F. HLT 280 Viticulture ....................................... 3
G. HLT 291 Field Training II ............................... 3
H. SMIB 121 Small Business Management .............. 3
I. PSYC 151 General Psychology ........................... 3

ASSOCIATE OF APPLIED SCIENCE DEGREE
REQUIREMENTS: LANDSCAPE TECHNOLOGY

I. General Education Core Credit Hours

(19 credit hours)

A. ENGL 151 Composition/Rhetoric I ....................... 3
B. BSAD 121 Introduction to Business or ................. 3
ECON 121 Introduction to Economics .................... 3
C. HUM 151 Introduction to Humanities .................. 3
D. MATH 150 Contemporary Mathematics ................... 3
E. CPSC 150 Introduction to Computers .................... 3
F. SPCM 151 Fundamentals of Speech Comm. ............... 3
G. HPED Elective ............................................. 1

II. Technical Program Core Credit Hours

(46 credit hours)

A. HLT 125 Soils and Plant Nutrition .................... 3
B. HLT 126 Plant Pests and Controls ..................... 3
C. HLT 140 Turf Science and Management ................. 3
D. HLT 190 Basic Horticulture ............................... 3
E. HLT 191 Woody Plant Materials ......................... 4
F. HLT 192 Herbaceous Plant Materials .................. 4
G. HLT 210 Intro. to Landscape Design .................. 3
H. HLT 220 Irrigation Systems ............................ 3
I. HLT 225 Landscape Construction ......................... 4
J. HLT 230 Site Analysis and Surveying ..................... 4
K. HLT 235 Landscape Business Operations ............... 4
L. HLT 260 Landscape Maintenance I ....................... 3
M. HLT 293 Summer Internship ............................. 4
N. HLT 296 Seminar ........................................... 1

III. Electives

(3 credit hours)

A. HLT 115 Native Plants of Texas ......................... 3
LEGAL ASSISTANT
A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM
Due to the increasing number of lawsuits filed each year, attorneys are requiring more paraprofessional and clerical help than ever before. One attorney may employ a receptionist, a secretary, two or more word processors, an office manager/accountant, one or more legal assistants/paralegal, and a law clerk. More and more, the typical law office is placing heavy emphasis on word processing, computer usage and electronic dictation. Lawyers are also looking for knowledge of substantive and procedural law when hiring new employees.

The student will develop skills needed in an automated law office. Entry-level staff employees making the transition to automation, and those re-entering the legal environment, will benefit from this program.

Areas of study include:

- legal terms and concepts
- law office management skills
- legal ethics
- legal research and writing
- substantive law
- procedural law
- word processing concepts
- legal word processing
- legal transcription

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES
Career opportunities in the legal field include legal assistant, legal secretary, law office manager, law clerk and attorney positions. Some of these careers require additional training and may require graduate or professional degrees. Prospective employers include:

- private law firms
- governmental agencies at county, state and federal levels
- private industry such as banks, savings and loan associations, title companies and corporations
- transportation industry such as airlines, railroads and rapid transit systems

CCCC's two degrees in Legal Assistant are designed for the student who wants to develop office skills and acquire general knowledge of law.

The Associate of Arts in Legal Assistant degree is recommended for those students who plan to transfer to a four-year institution for a bachelor's degree. Texas Woman's University will accept both A.A. and A.A.S. degree plans for transfer.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: LEGAL ASSISTANT

I. General Education Core (25 credit hours)

| A. ENGL 151 Composition/Rhetoric I | 3 |
| B. ENGL 152 Composition/Rhetoric II | 3 |
| C. SPCM 151 Fundamentals of Speech Comm | 3 |
| D. MATH 150 Contemporary Mathematics or | 3 |
| E. MATH 151 Re-Calculus for Bus./Econ. | 3 |
| F. ECON 291 Principles of Economics - Macro | 3 |
| G. HUM 151 Introduction to Humanities | 3 |
| H. CPSC 150 Introduction to Computers | 3 |
| I. HPED 3 Elective | 1 |

II. Technical Program Core (12 credit hours)

| A. OFAD 122 Advanced Typewriting/Legal | 3 |
| B. OFAD 223 Word Processing I | 3 |
| C. OFAD 224 Word Processing II | 3 |
| D. OFAD 225 Machine Transcription/Legal | 3 |

III. Major Courses (15 credit hours)

| A. LEGL 130 Law and Judicial Systems | 3 |
IV. Electives

(9 credit hours)

A. LEGL 237 Texas Legal Systems ........................................... 3
B. LEGL 238 Law of Defendants ............................................. 3
C. LEGL 242 Personal Property ............................................. 3
D. LEGL 251 Family Law ..................................................... 3
E. LEGL 252 Wills, Trusts, Probate ........................................ 3
F. LEGL 261 Business Organizations ....................................... 3
G. LEGL 262 Tort & Insurance Law ......................................... 3
H. LEGL 264 Business Legal Environment ............................... 3
I. LEGL 700 Cooperative Education ....................................... 3
J. ACCT 192 Principles of Accounting I .................................. 3
K. BSAD 122 Principles of Management ................................... 3
L. BSAD 123 Business Law .................................................. 3
M. CRJS 152 Intro. to Criminal Justice .................................... 3
N. CRJS 153 Fundamentals of Criminal Law ............................. 3
O. CRJS 154 Courts and Criminal Procedure ............................ 3
P. PLSC 261 American Government I ..................................... 3
Q. PLSC 262 American Government II .................................... 3
R. HIST 151 U.S. History I .................................................... 3
S. HIST 152 U.S. History II .................................................. 3
T. RLST 139 Real Estate Law-Contracts ................................... 3
U. RLST 237 Real Estate Law ................................................ 3

MA NAGEMENT

MANAGEMENT DEVELOPMENT

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The world of management development is an exciting field that presents many unique opportunities. Every business, organization and group needs effective leaders to plan, organize, lead and control the many activities that accompany a successful venture. Topics include basic management foundations and theories, human resource management, human relations training, sales and promotion and capital acquisition skills.

The skills acquired in this program will enable the student to identify and resolve many problems that are encountered while working with individuals, groups and organizations.

Earning an Associate of Applied Science degree in Management Development can enable the student to work in many fields:

- manufacturing
- retail
- service
- restaurant
- hotel/motel
- general office

Management is essential to all organizations. As a result, jobs will always be available in many fields, including government and public service.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor’s degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE

REQUIREMENTS: MANAGEMENT DEVELOPMENT

I. General Education Core Credit Hours (22 credit hours)

A. ENGL 151 Composition/Rhetoric I .................................... 3
B. SPCM 151 Fundamentals of Speech Comm. ......................... 3
C. MATH 150 Contemporary Mathematics or ......................... 3
D. MATH 151 Pre-Calculus for Bus./Econ. ............................... 3
E. ECON 121 Introduction to Economics or ......................... 3
F. PSYC 121 Applied Psychology or .................................... 3
G. PSYC 151 General Psychology ......................................... 3
H. HUM 151 Introduction to Humanities ............................... 3
I. CPSC 150 Introduction to Computers .................................. 3
J. HPE D Elective ............................................................... 1

II. Technical Program Core Credit Hours (12 credit hours)

A. ACCT 191 Principles of Accounting I ............................... 3
B. BSAD 122 Principles of Management ............................... 3
C. BSAD 221 Principles of Marketing .................................... 3
D. BSAD 222 Personnel Management ................................. 3
III. Major Courses
(24 credit hours)
A. BSAD 123 Business Law 3
B. BSAD 125 Supervisory Management 3
C. BSAD 228 Organizational Behavior 3
D. BSAD 231 Labor Management Relations 3
E. CIS 220 Integrated Spreadsheet App. 3
F. SBMT 221 Financing a Small Business 3
G. ENGL 291 Technical Writing 3
H. ACCT 192 Principles of Accounting II 3

*See ENGL 291 course description.

IV. Electives
(6 credit hours)
A. CIS 130 BASIC Programming 3
B. CIS 230 Database Applications 3
C. BSAD 226 Sales Management 3
D. BSAD 223 Principles of Retailing 3
E. BSAD 224 Principles of Advertising 3
F. BSAD 225 International Business 3
G. BSAD 700 Cooperative Education I 3
H. BSAD 705 Cooperative Education II 3

MANAGEMENT
SMALL BUSINESS MANAGEMENT
A two-year Associate of Applied Science degree program
61 credit hours required to graduate

ABOUT OUR PROGRAM
The degree in Management with a Small Business major is designed to provide an understanding of how to operate a business. Topics include how to prepare a business plan, raise capital, plan cash flow requirements, create tax strategies, develop marketing programs and establish rewarding employee benefit plans.

This program offers a unique opportunity for the student to generate ideas, identify and resolve business problems and develop an entrepreneurial management style.

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES
The Associate of Applied Science degree in Management with a Small Business major provides the essential core of management practices and prepares students for:
- entrepreneurship
- manufacturing
- construction
- retail
- services
- personnel

The federal government considers 97 percent of American businesses to be small businesses; one half of those employed in this country work in small business enterprises. Small businesses create over 80 percent of all new jobs in the United States.

ARTICULATION/TRANSFER AGREEMENT
Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: SMALL BUSINESS MANAGEMENT

I. General Education Core
(22 credit hours)
A. ENGL 151 Composition/Rhetoric I 3
B. SPCM 151 Fundamentals of Speech Comm. 3
C. MATH 150 Pre-Calculus for Bus./Econ. 3
D. ECON 291 Principles of Economics - Macro 3
E. PSYC 151 General Psychology 3
F. HUM 151 Introduction to Humanities 3
G. CPSC 150 Introduction to Computers 3
H. HPED Elective 1

II. Technical Program Core
(12 credit hours)
A. ACCT 191 Principles of Accounting I 3
B. BSAD 122 Principles of Management 3
C. BSAD 221 Principles of Marketing 3
D. BSAD 222 Personnel Management 3

III. Major Courses
(18 credit hours)
A. BSAD 123 Business Law 3
B. SBMT 121 Small Business Management 3
C. SBMT 221 Small Business Finance 3
D. SBMT 223 Entrepreneurship 3
E. CIS 220 Integrated Spreadsheet App. 3
F. MRKT 222 Principles of Selling 3
MANAGEMENT

CERTIFICATE PROGRAMS

The one-year management certificate programs are designed to prepare individuals with basic skills in management and small business management.

CERTIFICATE REQUIREMENTS: BUSINESS MANAGEMENT

(30 CREDIT HOURS)

A. BSAD 122 Principles of Management .......... 3
B. BSAD 123 Business Law ...................... 3
C. BSAD 222 Principles of Supervisory Management .......... 3
D. BSAD 224 Principles of Advertising .......... 3
E. ACCT 191 Principles of Accounting I .......... 3
F. BSAD 228 Organizational Behavior .......... 3
G. BSAD 231 Labor Management Relations .......... 3
H. ACCT 192 Principles of Accounting II .......... 3
I. CIS 220 Integrated Spreadsheet App. .......... 3
J. SBMT 221 Financing a Small Business .......... 3

CERTIFICATE REQUIREMENTS: SMALL BUSINESS MANAGEMENT

(30 CREDIT HOURS)

A. ACCT 191 Principles of Accounting I .......... 3
B. BSAD 123 Business Law ...................... 3
C. BSAD 221 Principles of Marketing .......... 3
D. CIS 128 Microcomputer Concepts .......... 3
E. ECON 121 Introduction to Economics .......... 3
F. SBMT 121 Small Business Management .......... 3
G. SBMT 221 Small Business Finance .......... 3
H. MRKT 222 Principles of Selling .......... 3

I. ELECTIVES (Select two):

ACCT 192 Principles of Accounting II .......... 3
CIS 220 Integrated Spreadsheet App. .......... 3
BSAD 122 Principles of Management .......... 3
BSAD 222 Personnel Management .......... 3
SBMT 223 Entrepreneurship .......... 3
SBMT 700 Cooperative Education I .......... 3
SBMT 705 Cooperative Education II .......... 3

MARKETING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED IN GRADUATE

ABOUT OUR PROGRAM

The Collin County Community College Associate of Applied Science degree in Marketing incorporates professional education courses to prepare individuals for career paths in retail or wholesale organizations, profit or non-profit service organizations, governmental agencies and academic institutions.

This program is designed to give a thorough background in aspects of marketing to students who desire such and to provide methods for improving skills for students already in a marketing career.

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES

The Associate of Applied Science degree in Marketing provides the essential core of marketing practices and prepares students for positions in:

- retailing
- wholesaling
- marketing management
- sales
- consulting
- directing
- promotion
- advertising
- industrial marketing management
- international marketing

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's
degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE

REQUIREMENTS: MARKETING

I. General Education Core

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ENGL 151</td>
<td>Composition/Rhetoric I</td>
<td>3</td>
</tr>
<tr>
<td>SPCM 151</td>
<td>Fund of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Contemporary Mathematics or</td>
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</tr>
<tr>
<td>MATH 151</td>
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<tr>
<td>ECON 291</td>
<td>Principles of Economics * Macro</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 121</td>
<td>Applied Psychology or</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 151</td>
<td>General Psychology</td>
<td>3</td>
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<tr>
<td>HUM 151</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>CPSC 150</td>
<td>Introduction to Computers</td>
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<td>HPED</td>
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II. Technical Program Core

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<th>Credit Hours</th>
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ACCT 191</td>
<td>Principles of Accounting I</td>
<td>3</td>
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<tr>
<td>MRKT 222</td>
<td>Principles of Selling</td>
<td>3</td>
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<tr>
<td>BSAD 221</td>
<td>Principles of Marketing</td>
<td>3</td>
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<tr>
<td>BSAD 123</td>
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</tr>
<tr>
<td>SBMT 121</td>
<td>Small Business Management</td>
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III. Major Courses

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<tr>
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BSAD 223</td>
<td>Principles of Retailing</td>
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</tr>
<tr>
<td>BSAD 224</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 221</td>
<td>Market Research</td>
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<tr>
<td>MRKT 223</td>
<td>Business Ethics</td>
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<td>MRKT 224</td>
<td>Promotion Techniques</td>
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<tr>
<td>MRKT 700</td>
<td>Cooperative Education I</td>
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IV. Electives

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<th>Course Title</th>
<th>Credit Hours</th>
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<tr>
<td>ADV 190</td>
<td>Survey of Advertising Art</td>
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<td>ADV 287</td>
<td>Visual Communications I</td>
<td>3</td>
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<tr>
<td>JOUR 151</td>
<td>Intro to Mass Communication</td>
<td>3</td>
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<tr>
<td>MRKT 225</td>
<td>Fashion Show production</td>
<td>3</td>
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<tr>
<td>MRKT 705</td>
<td>Cooperative Education II</td>
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<tr>
<td>SPCM 293</td>
<td>Business and Prof. Speaking</td>
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MARKETING

CERTIFICATE PROGRAM

CERTIFICATE REQUIREMENTS MARKETING

(30 CREDIT HOURS)

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ACCT 191</td>
<td>Principles of Accounting I</td>
<td>3</td>
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<tr>
<td>BSAD 123</td>
<td>Business Law</td>
<td>3</td>
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<tr>
<td>BSAD 221</td>
<td>Principles of Marketing</td>
<td>3</td>
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<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 221</td>
<td>Market Research</td>
<td>3</td>
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<tr>
<td>MRKT 222</td>
<td>Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 223</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 224</td>
<td>Promotion Techniques</td>
<td>3</td>
</tr>
<tr>
<td>SBMT 121</td>
<td>Small Business Management</td>
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</tbody>
</table>

MARKETING

FASHION MARKETING

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

61 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The Collin County Community College Associate of Applied Science degree in Marketing with a major in Fashion Marketing incorporates both marketing and management aspects of skills needed for a fashion merchandising career. CCCC is committed to providing students with excellent educational programs that meet the demands of today’s fashion job market — and excellence in teaching that meets the needs of each student enrolled.

This program is designed to give the novice a thorough background in fashion marketing management and to provide an opportunity for those currently in the business to improve skills needed for success in the apparel industry.

Students planning to transfer to a four-year institution should check with an advisor.

CAREER OPPORTUNITIES

Positions with apparel makers fall into five general categories: production, administration, design, selling and communication. Job duties can be varied and depend upon a firm's particular job interpretation. Listed below are some of the possible career opportunities:

- marketing director
- costing engineer
- piece goods buyer
- order processor
- draper
- sketcher
- designer trainee
- pattern maker
- showroom salesperson
- public relations
- fashion director

**Articulation/Transfer Agreement**

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

**Associate of Applied Science Degree Requirements: Marketing/Fashion Marketing**

I. General Education Core
   
   (22 credit hours)
   A. ENGL 151 Composition/Rhetoric I .......... 3
   B. SPCM 151 Fundamentals of Speech Comm. ..... 3
   C. MATH 150 Contemporary Mathematics or 3
      MATH 151 Pre-Calculus for Bus./Econ. ..........3
   D. ECON 291 Principles of Economics - Macro ...... 3
   E. PSYC 121 Applied Psychology or .......... 3
      PSYC 151 General Psychology .................. 3
   F. HUM 151 Introduction to Humanities ............ 3
   G. CPSC 150 Introduction to Computers ............ 3
   H. HPED Elective .................................. 1

II. Technical Program Core
   (12 credit hours)
   A. ACCT 191 Principles of Accounting I ..........3
   B. MRKT 222 Principles of Selling ................ 3
   C. BSAD 221 Principles of Marketing ............ 3
   D. SBMT 121 Small Business Management ............ 3

III. Major Courses
   (21 credit hours)
   A. MRKT 122 Fashion Marketing ................. 3
   B. MRKT 126 Fashion Design .................... 3
   C. MRKT 220 Fashion Buying .................... 3
   D. MRKT 221 Market Research .................... 3
   E. MRKT 225 Fashion Show Production .......... 3
   F. MRKT 700 Cooperative Education I ........... 3
   G. BSAD 223 Principles of Retailing ............ 3

IV. Electives
   (6 credit hours)
   A. SPCM 293 Business and Prof. Speaking ..........3
   B. MRKT 705 Cooperative Education II ............ 3
   C. ART 298 Fibers I .............................. 3
   D. ADV 287 Visual Communications I ............ 3
   E. ACCT 192 Principles of Accounting II .......... 3
   F. BSAD 123 Business Law ........................ 3

**Nursing**

A two-year Associate of Applied Science degree program

77 credit hours required to graduate

**About Our Program**

This two-year Associate of Applied Science degree is offered to prepare the student to test for the Registered Nurse license. The nursing curriculum is approved by the Board of Nurse Examiners for the State of Texas and accrediting by the National League for Nursing Council of Associate Degree Programs is in progress.

Collin County health care facilities enthusiastically support the ADN program. Studies indicate that from 250-300 nursing positions will be available in Collin County within the next five years.

CCCC has developed a direct transfer agreement with bachelor (B.S.N.) and master (M.S.N.) degree program. Students planning to transfer to a four-year institution should check with an academic advisor.
CAREER OPPORTUNITIES

Registered nurses can expect excellent job opportunities. Recent studies in Collin County emphasize the need for registered nurses in hospitals, clinics, nursing homes and doctor's offices.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

SCHOLARSHIPS

Various scholarships are available to students when they have been accepted into the nursing program. Most scholarships are awarded based on financial need. Other types of monetary support are available through the Financial Aid office.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: NURSING

I. Pre-Entrance Requirements
   (15 credit hours)
   A. MATH 151 Pre-Calculus for Bus./Econ. or .......... 3
   B. MATH 153 Statistics or ................................ 3
   C. MATH 181 College Algebra ................................ 3
   D. BIOL 151 Introduction to Biology I* or .......... 4
   E. BIOL 191 General Biology I* ................................ 4
   F. BIOL 291 Anatomy and Physiology I ..................... 4
   G. BIOL 292 Anatomy and Physiology II ..................... 4
   H. BIOL 293 Microbiology ........................................ 4

II. First Semester
   (13 credit hours)
   A. NURS 147 Nursing I ............................................ 7
   B. PSYC 151 General Psychology ................................. 3
   C. ENGL 151 Composition/Rhetoric I ............................. 3

III. Second Semester
   (15 credit hours)
   A. NURS 148 Nursing II ............................................ 8
   B. PSYC 251 Life Span Psychology ................................. 3
   C. ENGL 152 Composition/Rhetoric II ............................. 3
   D. HPE 252 Physical Education Elective ......................... 1

IV. Summer Session
   (4 credit hours)
   A. NURS 244 Nursing III ............................................ 4

V. Fourth Semester
   (12 credit hours)
   A. NURS 259 Nursing IV ............................................. 9
   B. SOC 151 Intro. to Sociology or ............................... 3
   C. SOC 152 Social Problems ........................................ 3

VI. Fifth Semester
   (12 credit hours)
   A. NURS 269 Nursing ................................................. 9
   B. ELECTIVE (Computer Science or Speech) .................... 3

Notes: Special admission criteria applies to this program and registration is by permission only. See the director of nursing for additional information.

Student placement in mathematics and English is based upon the results of tests and subjects completed before admission.

*BiGj 151 or 191 are not counted toward degree requirements.

OFFICE ADMINISTRATION GENERAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The degree in Office Administration-General is designed to incorporate both the technical and behavioral aspects of jobs in the automated office. Areas of study include:

- public relations—effective communication and the business image
- office skills—document production, business telephone techniques and electronic memory calculators
- proofreading/editing—language applications for business correspondence and documents
- computers and spreadsheet software—hands-on experience with DOS, spreadsheet and integrated programs such as LOTUS 1-2-3 and Microsoft Works
- word processing—hands-on experience using software such as Wordperfect 5.0, 5.1, Microsoft Word 5.0 for document production and desktop publishing
- records management—ARMA filing rules, design and implementation of efficient and cost-effective system

The General Office program was created jointly by business and education leaders from DSC Communications, Electronic Data Systems, Fisher Control International, InteCom Incorporated, J.C. Penney Financial Services, Texas Instruments and Kelly Temporary Services.

Students planning to transfer to a four-year institution should check with an academic advisor.
II. ASSOCIATE

"Classifieds" for those interested in various positions include:

- Human Resources Clerk — primary responsibilities include greeting and screening visitors, data input and general office support.
- Receptionist/Typist — individuals for front desk positions to answer phones, type 65 wpm and handle various other duties. Dictaphone experience helpful.
- CRT Operator — enter bills of lading by CRT, answer phones, process daily shipping reports and shipping labels.
- Typist — entry-level position requiring accurate typing skills (50 wpm).
- Billing Clerk — detail-oriented person to process invoices, purchase orders and inventory records. Typing and IO-key skills required.

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor’s degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: OFFICE ADMINISTRATION/GENERAL

I. General Education Core Credit Hours (22 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ENGL 151</td>
<td>Composition/Rhetoric I</td>
<td>3</td>
</tr>
<tr>
<td>B. SPCM 151</td>
<td>Fundamentals of Speech</td>
<td>3</td>
</tr>
<tr>
<td>C. MATH 150</td>
<td>Contemporary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>D. CPSC 150</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>E. HUM 151</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>F. PSYC 121</td>
<td>Applied Psychology</td>
<td>3</td>
</tr>
<tr>
<td>G. ECON 121</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td>H. HPED</td>
<td>Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

II. Technical Program Core (16 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. OFAD 121</td>
<td>Intermediate Typewriting</td>
<td>3</td>
</tr>
<tr>
<td>B. OFAD 122</td>
<td>Advanced Typewriting*</td>
<td>3</td>
</tr>
<tr>
<td>C. OFAD 131</td>
<td>Records Management*</td>
<td>2</td>
</tr>
<tr>
<td>D. OFAD 132</td>
<td>Proofreading/Editing*</td>
<td>2</td>
</tr>
<tr>
<td>E. OFAD 223</td>
<td>Word Processing I*</td>
<td>3</td>
</tr>
<tr>
<td>F. CIS 128</td>
<td>Microcomputer Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

III. Major Courses (12 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. OFAD 134</td>
<td>Electronic Calculator*</td>
<td>3</td>
</tr>
<tr>
<td>B. OFAD 230</td>
<td>Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>C. OFAD 224</td>
<td>Word Processing II*</td>
<td>3</td>
</tr>
<tr>
<td>D. ACCT 131</td>
<td>Elementary Accounting*</td>
<td>3</td>
</tr>
</tbody>
</table>

IV. Electives (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. OFAD 135</td>
<td>Business Correspondence</td>
<td>3</td>
</tr>
<tr>
<td>B. OFAD 220</td>
<td>Word Processing Software</td>
<td>3</td>
</tr>
<tr>
<td>C. OFAD 225</td>
<td>Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>D. OFAD 226</td>
<td>Word Processing III</td>
<td>3</td>
</tr>
<tr>
<td>E. OFAD 700</td>
<td>Cooperative Education I</td>
<td>3</td>
</tr>
<tr>
<td>F. OFAD 705</td>
<td>Cooperative Education II</td>
<td>3</td>
</tr>
<tr>
<td>G. BSAD 121</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>H. BSAD 122</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>I. BSAD 123</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>J. CIS 220</td>
<td>Integrated Spreadsheet Appl.</td>
<td>3</td>
</tr>
</tbody>
</table>

*These courses also apply toward the Office Support Certificate.

OFFICE ADMINISTRATION

MEDICAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The degree in Office Administration — Medical is designed to develop specialized skills for medical office personnel. Areas of study include:

- administrative responsibilities — appointments, telephone procedures, records management
- medical terminology — general and specialized medical terms and abbreviations
- medical transcription — patient records and reports
- financial responsibilities — insurance claims, accounting systems, fees and payments
- computers and spreadsheet software — hands-on experience with DOS, spreadsheet and integrated programs such as LOTUS 1-2-3 and Microsoft Works
- word processing — hands-on experience using software such as Wordperfect 5.0, 5.1, and Microsoft Word 5.0 for document production and desktop publishing

Students planning to transfer to a four-year institution should check with an academic advisor.
Note: Students completing the two-year Office Occupations program at Allen ISD, Denton ISD or Plano ISD may be eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog.

CAREER OPPORTUNITIES

The skills and personal attributes of health care personnel are unique to the profession.

A medical secretary may work for a doctor in:

- the general practitioner’s office
- a group practice
- the dental office
- hospitals and clinics

A person with medical secretarial training and skills is valued in other avenues of health care including:

- public health departments
- convalescent and nursing homes
- health insurance companies
- manufacturers and distributors of drugs, pharmaceutical products, surgical instruments and hospital supplies
- medical laboratories

ARTICULATION/TRANSFER AGREEMENT

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor’s degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

ASSOCIATE OF APPLIED SCIENCE DEGREE

REQUIREMENTS: OFFICE ADMINISTRATION/MEDICAL

I. General Education Core Credit Hours

(22 credit hours)

A. ENGL 151 Composition/Rhetoric I .......... 3
B. SPCM 151 Fundamentals of Speech .......... 3
C. MATH 150 Contemporary Mathematics or .... 3
   MATH 151 Pre-Calculus for Bus./Econ. ..........3
D. CPSC 150 Introduction to Computers ..........3
E. HUM 151 Introduction to Humanities ..........3
F. PSYC 121 Applied Psychology ............... 3
G. ECON 121 Introduction to Economics ..........3
H. HPED Elective ............................ 1

II. Technical Program Core Credit Hours

(16 credit hours)

A. OFAD 121 Intermediate Typewriting* ............3
B. OFAD 122 Advanced Typewriting* ............ 3
C. OFAD 131 Records Management* ............. 2
D. OFAD 132 Proofreading/Editing ............... 2
E. OFAD 223 Word Processing II* ............... 3
F. CIS 128 Microcomputer Concepts .............3

III. Major Courses

(15 credit hours)

A. OFAD 224 Word Processing II* ............... 3
B. OFAD 225 Machine Transcription* ............ 3
C. OFAD 237 Medical Office Procedures* ........3
D. ACCT 131 Elementary Accounting* .......... 3
E. HLSC 132 Medical Terminology* ............. 3

IV. Electives

(9 credit hours)

A. OFAD 126 Beginning Shorthand ............... 3
B. OFAD 127 Intermediate Shorthand ............ 3
C. OFAD 134 Electronic Calculator ...............3
D. OFAD 135 Business Correspondence .......... 3
E. OFAD 220 Word Processing Software ..........3
F. OFAD 226 Word Processing III ............... 3
G. OFAD 700 Cooperative Education I .......... 3
H. OFAD 705 Cooperative Education II ..........3
I. CIS 220 Integrated Spreadsheet Appl. ..........3

*These courses also apply toward the Medical Certificate.

OFFICE ADMINISTRATION SECRETARIAL

A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM

62 CREDIT HOURS REQUIRED TO GRADUATE

ABOUT OUR PROGRAM

The degree in Office Administration—Secretarial is designed to prepare the student for an automated office environment. The secretarial program enables the student to master office skills and to experience state-of-the-art technology for the fast-changing business climate. Areas of study include:

- office management—handle administrative details, coordinate office procedures
- document production—increase speed, accuracy and production of business documents
- computer applications—word processing, desktop publishing, spreadsheet and integrated programs using software such as Wordperfect 5.0/5.1, Microsoft Word 5.0, LOTUS 1–2–3, Microsoft Works, DOS
- records management—ARMA filing rules, design and implementation of cost-effective systems that maintain efficient access to business records
• Certified Professional Secretary Preparation—prestigious credentials for the experienced secretary

Students planning to transfer to a four-year institution should check with an academic advisor.

Note: Students completing the two-year Office Occupations Program at Allen ISD, Denison ISD or Plano ISD may be eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog.

Career Opportunities

Recent surveys of Collin County businesses indicate secretarial office jobs will continue to increase through the 1990s. Current technology has broadened the traditional roles of secretaries and enhanced their relationship with management.

Today's secretary is often considered an administrative assistant who complements the executive in making decisions, conducting research and meeting the public. Basic shorthand skills continue to give secretaries an edge both in entry-level jobs and in opportunities for promotion.

Courses required for the A.A.S. Secretarial degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from CCC to be applied toward the A.A.S. degree in Office Administration.

Articulation/Transfer Agreement

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

Associate of Applied Science Degree Requirements: Office Administration/Secretarial

I. General Education Core Credit Hours

(22 credit hours)

A. ENGL 151 Composition/Rhetoric 3
B. SPCM 151 Fundamentals of Speech Comm. 3
C. MATH 150 Contemporary Mathematics 3
D. MATH 151 Pre-Calculus for Bus./Econ. 3
E. CPSC 150 Introduction to Computers 3
F. PSYC 121 Applied Psychology 3
G. ECON 121 Introduction to Economics 3
H. HPED Elective 1

II. Technical Program Core

(16 credit hours)

A. OFAD 121 Intermediate Typewriting* 3
B. OFAD 122 Advanced Typewriting* 3
C. OFAD 131 Records Management* 2
D. OFAD 132 Proofreading/Editing* 2
E. OFAD 223 Word Processing I 3
F. CIS 128 Microcomputer Concepts* 3

III. Major Courses

(15 credit hours)

A. OFAD 135 Business Correspondence 3
B. OFAD 224 Word Processing II* 3
C. OFAD 225 Machine Transcription 3
D. OFAD 230 Office Procedures 3
E. ACCT 131 Elementary Accounting* 3

IV. Electives

(9 credit hours)

A. OFAD 126 Beginning Shorthand 3
B. OFAD 127 Intermediate Shorthand 3
C. OFAD 134 Electronic Calculator* 3
D. OFAD 220 Word Processing Software* 3
E. OFAD 226 Word Processing III* 3
F. OFAD 700 Cooperative Education I 3
G. OFAD 705 Cooperative Education II 3
H. CIS 220 Integrated Spreadsheet Appl. 3
I. BSAD 121 Introduction to Business 3
J. BSAD 123 Business Law 3
K. BSAD 122 Principles of Management 3
L. BSAD 125 Supervisory Management 3

These courses also apply toward the Office Support and Word Processing certificates.

Office Administration Certificate Programs

(22–26 credit hours)

Medical Office

The Medical Office Certificate program is a one-year curriculum designed to prepare individuals for entry-level positions in a medical office or health care facility.

Certificate requirements: Medical Office

(26 credit hours)

A. OFAD 121 Intermediate Typewriting 3
B. OFAD 122 Advanced Typewriting 3
C. OFAD 131 Records Management 2
D. OFAD 223 Word Processing I 3
E. OFAD 224 Word Processing II/Medical 3
F. OFAD 225 Machine Transcription/Medical 3
G. OFAD 237 Medical Office Procedures 3
H. ACCT 131 Elementary Accounting 3
I. HLSC 132 Medical Terminology 3

OFFICE SUPPORT
The Office Support Certificate program is a one-year program designed to prepare individuals for entry-level general office support positions.

CERTIFICATE REQUIREMENTS OFFICE SUPPORT
(22 CREDIT HOURS)
A. OFAD 121 Intermediate Typewriting 3
B. OFAD 122 Advanced Typewriting 3
C. OFAD 131 Records Management 2
D. OFAD 132 Proofreading/Editing 2
E. OFAD 134 Electronic Calculator 3
F. OFAD 223 Word Processing I 3
G. ACCT 131 Elementary Accounting 3
H. OFAD 224 Word Processing II

WORD PROCESSING
The Word Processing Certificate program is a one-year program designed to prepare individuals for entry-level positions requiring extensive document preparation using microcomputer equipment and word processing software.

CERTIFICATE REQUIREMENTS: WORD PROCESSING
(25 CREDIT HOURS)
A. OFAD 121 Intermediate Typewriting 3
B. OFAD 122 Advanced Typewriting 3
C. OFAD 131 Records Management 2
D. OFAD 132 Proofreading/Editing 2
E. CIS 128 Microcomputer Concepts 3
F. OFAD 223 Word Processing I 3
G. OFAD 224 Word Processing II 3
H. OFAD 226 Word Processing III 3
I. CIS 220 Integrated Spreadsheet App. 3

Note: students completing the two-year Office Occupations program at Allen ISD, Denton ISD or Plano ISD may be eligible to receive articulated credit. See "Customized Articulation Programs" in this catalog.

REAL ESTATE
A TWO-YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE PROGRAM
60 CREDIT HOURS REQUIRED TO GRADUATE
ABOUT OUR PROGRAM
Real Estate is a dynamic field in which highly motivated men and women can and do create their own success stories. The degree program in Real Estate is designed with flexibility to allow students to successfully achieve a goal, whether it be personal knowledge, receipt of a degree, completion of a certificate program, transfer to a four-year institution or real estate licensure.

Students will explore a variety of topics including:
- fundamentals and principles of real estate
- sources of financing
- state and federal influences on financing
- legal rights of owners, buyers and brokers
- property appraisal
- contract negotiations
- closing

An excellent instructional staff and a cooperative education program with local brokers give real estate students at CCCC a personalized, practical high quality educational experience.

Students planning to transfer to a four-year institution should check with an academic advisor.

CAREER OPPORTUNITIES
The study of real estate can be the beginning of an interesting and profitable career. Real estate is a vast and complex industry and career options are numerous. Some of the possibilities are:
- brokerage
- appraisal
- financing
- property development
- counseling
- education
- insurance

ARTICULATION/TRANSFER AGREEMENT
Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For
detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

**ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS: REAL ESTATE**

I. General Education Core  
(22 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ENGL 151 Composition/Rhetoric I</td>
<td>3</td>
</tr>
<tr>
<td>B. ENGL 152 Composition/Rhetoric II</td>
<td>3</td>
</tr>
<tr>
<td>C. MATH 150 Contemporary Mathematics or MATH 151 Pre-Calculus for Bus./Econ.</td>
<td>3</td>
</tr>
<tr>
<td>D. ECON 121 Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td>E. PSYC 121 Applied Psychology or PSYC 151 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>F. HUM 151 Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>G. CPSC 150 Introduction to Computers</td>
<td>3</td>
</tr>
<tr>
<td>H. HPED  Elective</td>
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II. Technical Program Core  
(8 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>A. OFAD 133 Computer Keyboarding</td>
<td>2</td>
</tr>
<tr>
<td>B. SPCM 151 Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>C. BSAD 121 Introduction to Business</td>
<td>3</td>
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</table>

III. Major Courses  
(18 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>A. RLST 133 Real Estate Principles I</td>
<td>3</td>
</tr>
<tr>
<td>B. RLST 134 Real Estate Principles II</td>
<td>3</td>
</tr>
<tr>
<td>C. RLST 136 Real Estate Math</td>
<td>3</td>
</tr>
<tr>
<td>D. RLST 138 Real Estate Sales and Mktg</td>
<td>3</td>
</tr>
<tr>
<td>E. RLST 139 Real Estate Law-Contracts</td>
<td>3</td>
</tr>
<tr>
<td>F. RLST 235 Real Estate Finance</td>
<td>3</td>
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</table>

IV. Electives  
(15 credit hours)

**MAJOR—MINIMUM 6 CREDIT HOURS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. RLST 135 Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>B. RLST 236 RE Property Management</td>
<td>3</td>
</tr>
<tr>
<td>C. RLST 234 Real Estate Investments</td>
<td>3</td>
</tr>
<tr>
<td>D. RLST 237 Real Estate Law</td>
<td>3</td>
</tr>
<tr>
<td>E. RLST 238 Title, Abstract, Escrow</td>
<td>3</td>
</tr>
<tr>
<td>F. RLST 700 Cooperative Work Experience I</td>
<td>3</td>
</tr>
<tr>
<td>G. RLST 241 Real Estate Commercial</td>
<td>3</td>
</tr>
<tr>
<td>H. RLST 242 Real Estate Finance Analysis</td>
<td>3</td>
</tr>
<tr>
<td>I. RLST 251 Real Estate Brokerage</td>
<td>3</td>
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**RELATED—6-9 CREDIT HOURS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>A. ACCT 191 Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>B. CIS 220 Integrated Spreadsheet Appl</td>
<td>3</td>
</tr>
<tr>
<td>C. BSAD 122 Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>D. BSAD 123 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>E. BSAD 222 Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>F. SBMT 121 Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>G. SBMT 222 Small Business Operations</td>
<td>3</td>
</tr>
<tr>
<td>H. BSAD 226 Sales Management</td>
<td>3</td>
</tr>
<tr>
<td>I. RLST 297 Selected Topics</td>
<td>3</td>
</tr>
<tr>
<td>J. General Course Work as Approved by Coordinator</td>
<td>3</td>
</tr>
</tbody>
</table>

**REAL ESTATE CERTIFICATE PROGRAM**

(30 CREDIT HOURS)

**CERTIFICATE REQUIREMENTS REAL ESTATE**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. RLST 133 Real Estate Principles I</td>
<td>3</td>
</tr>
<tr>
<td>B. RLST 134 Real Estate Principles II</td>
<td>3</td>
</tr>
<tr>
<td>C. RLST 135 Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>D. RLST 136 Real Estate Math OR RLST 242 Real Estate Fin. Analysis</td>
<td>3</td>
</tr>
<tr>
<td>E. RLST 138 Real Estate Sales and Marketing</td>
<td>3</td>
</tr>
<tr>
<td>F. RLST 139 Real Estate Law/Contracts</td>
<td>3</td>
</tr>
<tr>
<td>G. RLST 235 Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>H. RLST 237 Real Estate Law</td>
<td>3</td>
</tr>
<tr>
<td>I. ELECTIVES Select two: RLST 234 Real Estate Investments</td>
<td>3</td>
</tr>
<tr>
<td>RLST 236 Real Estate Property Mgt</td>
<td>3</td>
</tr>
<tr>
<td>RLST 238 Real Estate Title, Abstract and Escrow</td>
<td>3</td>
</tr>
<tr>
<td>RLST 700 Cooperative Work Experience</td>
<td>3</td>
</tr>
<tr>
<td>RLST 241 Real Estate Commercial</td>
<td>3</td>
</tr>
<tr>
<td>RLST 242 Real Estate Financial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>RLST 251 Real Estate Brokerage</td>
<td>3</td>
</tr>
</tbody>
</table>

Other course work as approved.

**RESPIRATORY CARE**

* A two-year Associate of Applied Science degree program

**NOTE: THIS PROGRAM MAY BE REVISED DURING THE SUMMER OF 1991**

72 CREDIT HOURS REQUIRED TO GRADUATE

**ABOUT OUR PROGRAM**

Respiratory care offers two programs which prepare individuals for an allied health specialty in clinical care and management of respiratory disorders. The 12-month program leads to a certificate of proficiency and qualifies the graduate to apply for the Certified Respiratory Therapy...
Technician board examination. The 22.5 month program graduates a student with an Associate in Applied Science degree and qualifies the individual to apply for the Registered Respiratory Therapist board examination.

The curriculum for the certificate program is included in the registry curriculum which is expanded with academic courses.

**Career Opportunities**

Career opportunities in the health care industry for certified respiratory therapy technicians and registered respiratory therapists are increasing rapidly. Recent surveys indicate that the supply of trained respiratory care professionals has not been sufficient to meet the progressive growth in demand.

Employment opportunities include:

- Certified Respiratory Therapy Technician (CRTT)
- Registered Respiratory Therapist (RRT)

**Articulation/Transfer Agreement**

Formal articulation and/or transfer agreements have been established allowing graduates with an Associate of Applied Science degree to continue their education in bachelor's degree programs at specific four-year universities. For detailed information contact the coordinator of the A.A.S. program or the director of articulation and transfer programs.

**Associate of Applied Science Degree Requirements Respiratory Care Technology (Cardiopulmonary)**

**Certification Eligibility Option**

<table>
<thead>
<tr>
<th>I. Semester One</th>
<th>16 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. RTTP 112 Cardiopulmonary Anatomy and Physiology</td>
<td>2</td>
</tr>
<tr>
<td>B. RTTP 113 Basic Respiratory Therapy</td>
<td>3</td>
</tr>
<tr>
<td>C. RTTP 114 Respiratory Clinical Orientation</td>
<td>4</td>
</tr>
<tr>
<td>D. RTTP 115 Respiratory Technology I</td>
<td>4</td>
</tr>
<tr>
<td>E. CPSC 150 Introduction to Computer Science</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Semester Two</th>
<th>16 credit hours</th>
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<tbody>
<tr>
<td>A. RTTP 120 Respiratory Pathology</td>
<td>3</td>
</tr>
<tr>
<td>B. RTTP 121 Pediatric Respiratory Care</td>
<td>1</td>
</tr>
<tr>
<td>C. RTTP 122 Respiratory Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>D. RTTP 123 Clinical Laboratory Appl.</td>
<td>2</td>
</tr>
<tr>
<td>E. RTTP 124 Respiratory Technology II</td>
<td>4</td>
</tr>
<tr>
<td>F. BIOL 291 Anatomy and Physiology I</td>
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<table>
<thead>
<tr>
<th>III. Summer Session One</th>
<th>6 credit hours</th>
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<tbody>
<tr>
<td>A. ENGL 151 Composition and Rhetoric I</td>
<td>3</td>
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<tr>
<td>B. RTTP 125 Clinical Procedures I</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Summer Session Two</th>
<th>3 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. RTTP 126 Clinical Procedures II</td>
<td>3</td>
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</tbody>
</table>

**First Year Total = 41**

Prerequisites to second year:
- Must be a graduate of a traditional college-based AMA and JRCRTE accredited certification program
- BIOL 291 Anatomy and Physiology I
- CPSC 150 Introduction to Computers

**Registry Eligible CRRT-RRT Transition Curriculum**

<table>
<thead>
<tr>
<th>V. Semester Three</th>
<th>16 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. RTTP 213 Clinical Practice I</td>
<td>3</td>
</tr>
<tr>
<td>B. RTTP 214 Respiratory Technology III</td>
<td>4</td>
</tr>
<tr>
<td>C. RTTP 215 Advanced Cardiopulmonary Topics</td>
<td>3</td>
</tr>
<tr>
<td>D. BIOL 292 Anatomy and Physiology II</td>
<td>4</td>
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<tr>
<td>E. Social/Behavioral Sciences Elective</td>
<td>3</td>
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</tbody>
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<table>
<thead>
<tr>
<th>VI. Semester Four</th>
<th>15 credit hours</th>
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</thead>
<tbody>
<tr>
<td>A. RTTP 220 Respiratory Care Planning</td>
<td>3</td>
</tr>
<tr>
<td>B. RTTP 221 App. Cardiopulmonary Pathology</td>
<td>3</td>
</tr>
<tr>
<td>C. RTTP 223 Clinical Practice II</td>
<td>1</td>
</tr>
<tr>
<td>D. BIOL 293 Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>E. CHEM 151 Introduction to Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>F. HPED Elective (optional)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Second Year Total = 31**

Note: Special admission criteria applies to this program and registration is by permission only. See coordinator/advisor for additional information.
ACCOUNTING

ACCT 131 Elementary Accounting
Designed for those persons who need to be familiar with the basic principles of accounting in order to manage the financial records of a business. It covers the recording and reporting of business transactions including the accounting cycle, financial statements and payroll. Lab required. 3 credit hours.

ACCT 191 Principles of Accounting
Concepts and applications of measuring and analyzing financial information for business entities. Topics include the accounting cycle, current assets, long-term assets and the preparation of financial statements. Lab required. 3 credit hours.

ACCT 192 Principles of Accounting II
Concepts and applications of measuring and interpreting financial information for partnerships and corporations. Topics include cost data, budgeting and financial report analysis for use by management and third parties. Prerequisite: ACCT 191. Lab required. 3 credit hours.

ACCT 193 Managerial Accounting
Preparation and interpretation of accounting data used in management planning, decision-making and administrative control. Topics include product costing, budgeting, accounting controls and analytical techniques. Prerequisite: ACCT 192. Lab required. 3 credit hours.

ACCT 194 Intermediate Accounting I
Continued study of financial accounting topics in greater depth than in principles of accounting. Includes financial accounting functions and basic theory. Current assets and current liabilities, plant assets, and long-term liabilities. Prerequisite: ACCT 192. Lab required. 3 credit hours.

ACCT 195 Intermediate Accounting II
Continuation of Intermediate Accounting I. Topics include stockholder's equity, dilutive securities and investments, issues related to income measurement and preparation and analysis of financial statements. Prerequisite: ACCT 194. Lab required. 3 credit hours.

ACCT 196 Auditing
Introduction to auditing theory and practice. Topics include an introduction to professionalism, the general technology of auditing, audit program applications and reporting responsibilities. Prerequisite: ACCT 195. Lab required. 3 credit hours.

ACCT 291 Individual Income Taxation
History and the structure of federal income tax legislation as it pertains to individuals. Emphasis on current tax laws, preparation of tax returns and/or specific tax problems. Prerequisite: ACCT 191. Lab required. 3 credit hours.

ACCT 292 Partnership and Corporation Taxation
History and structure of federal income tax legislation as it pertains to partnerships and corporations. Emphasis on current tax laws, tax return preparation and/or specific tax problems. Prerequisite: ACCT 194, 195 and 291. Lab required. 3 credit hours.

ACCT 285 Accounting Ethics
Examination of problems and ethical dilemmas faced by those practicing accounting. Designed to develop the qualities required of a professional accountant, regardless of the organization in which the accountant will be active. Prerequisite: Consent of instructor. 3 credit hours.

ACCT 700 Cooperative Education
A comprehensive treatment of career related activities encountered in the student’s area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of instructor. 3 credit hours.

ADVERTISING ART

(Applied Communication Design)

ADV 130 Introduction to Static Camera Operation
Introduction to principles, procedures and practices of large format camera operation. Exposure and experience on Agfa and DuPont cameras. Line art, halftones and architectural applications. Lab required. 1 credit hour.

ADV 140 Introduction to Computer Graphics
Introduction to the computer as an art tool. Exposure to the various fields of advertising computer graphics including electronic imaging, electronic publishing, computer illustration, interactive multimedia and photo-manipulation. Introduction to basic computer functions, draw and paint and text tools, terminology, technology, keyboard familiarization, mouse use, software function and access. Lab required. 3 credit hours.

ADV 141 Creative Problem Solving
Introduction to creative problem solving techniques. Emphasis on concept development, copy writing and innovative and creative thinking. 3 credit hours.

ADV 142 Introduction to Electronic Imaging
Introduction to electronic imaging and color separation using the computer as the primary tool. Photo retouch and manipulation, scanned art imaging and computer generated art image processing. Companion course for Digital Photography. Photo and fine art majors welcome. Prerequisite: ADV 140. Lab required. 3 credit hours.

ADV 143 Computer Typography
Introduction to typography using the computer as the main tool. Exploration and definition of type, type design, beginning type manipulation and rendering. Prerequisite: ADV 140. Lab required. 3 credit hours.

ADV 144 Introduction to Interactive Multimedia Authoring
Introduction to multimedia, principles, theories, systems and applications. Exposure and experience in all major authoring software, lectures by leading multimedia developers and work on continuing multimedia projects. Prerequisite: ADV 140. Lab required. 3 credit hours.

ADV 190 Survey of Advertising Art
Introduction to advertising art including investigation into the various career opportunities and into the workings of an agency or in-house studio. Understanding of the relationship of art and visual communication and the psychology of effective advertising will be covered. 3 credit hours.

ADV 208 Sketching for Illustration
Contemporary, period and character drawing from live models with props. Emphasis on drawing and analysis of people and objects for accuracy, perspective, composition, analysis of light, shadow and value. Photo reference. Lab required. 3 credit hours.

ADV 231 Advertising Computer Graphics
An exploration of computer graphics with applications in design. Illustration and other areas of advertising art. Current trends in computer graphics will be explored. Creative solutions will be stressed. Prerequisite: ADV 140. Lab required. 3 credit hours.

ADV 232 Image Processing I
Continuation of Introduction to Electronic Imaging. ADV 142, Use of Macintosh hardware. Latest photo-imaging software, video capture and scanning to create electronic images. Output to high-end color printers, film printer and video. Prerequisite: ADV 142. Lab required. 3 credit hours.

ADV 233 Electronic Publishing for Graphic Design
Explores the use of electronic publishing software on Macintosh hardware as a tool in graphic design. Students will also scan and print. Prerequisites: ADV 231, 287. Lab required. 3 credit hours.
ADV 244 Advanced Electronic Publishing
Advanced course and continuation of ADV 233. Prerequisite: ADV 140, 143 and 233. Lab required. 3 credit hours.

ADV 236 2D Computer Animation
Various aspects of two dimensional animation on Macintosh with latest software. Students will develop concepts. storyboards, and produce a two dimensional animation with music and soundtrack. Prerequisite: ADV 231. Lab required. 3 credit hours.

ADV 287 Visual Communications I
An introduction to the field of advertising art including basic terminology, tools and media, typography, paste-up techniques, layout and design concepts, reproduction process and problem solving. Prerequisite: ART 191. Lab required. 3 credit hours.

ADV 288 Visual Communications II
An introduction to illustration for reproduction including techniques for wet and dry media with emphasis on problem solving. Prerequisite: ART 193. Lab required. 3 credit hours.

ADV 289 Computer Illustration
Illustration using the computer as the main tool. The primary focus is on black and white. Concentrated exploration of computer rendering, tools, scanning and printing. Fine art and photo majors welcome. Prerequisite: ADV 142 and ADV 288. Lab required. 3 credit hours.

ADV 290 Graphic Design and Production
Investigation of various graphic design problems with consideration of technical requirements and presentation techniques for camera-ready art. Current trends will be explored. Creative solutions will be stressed. Prerequisite: ADV 289. Lab required. 3 credit hours.

ADV 291 Advanced Graphic Design and Production
Further investigation of various graphic design problems with consideration of technical requirements and presentation techniques for camera-ready art. Advanced development of individual portfolio work will be stressed. Prerequisite: ADV 290. Lab required. 3 credit hours.

ADV 292 Illustration
Problems in advertising illustration with consideration of technical requirements and presentation techniques for camera-ready art. Current trends will be explored. Creative solutions will be stressed. Prerequisite: ADV 290. Lab required. 3 credit hours.

ADV 293 Advanced Illustration
Further development of problems in advertising illustration with consideration of technical requirements and presentation techniques for camera-ready art. Advanced development of individual portfolio work will be stressed. Prerequisite: ADV 292. Lab required. 3 credit hours.

ADV 294 Professional Practices
Overview of professional practices required both in the work place and as a free-lance artist. Networking, professional organizations, presentation skills and job-seeking techniques will be covered. Prerequisite: ADV 287 or ADV 288. Lab required. 3 credit hours.

ADV 295 AD Agency
Overview of professional practices required both in the work place and as a free-lance artist. Networking, professional organizations, presentation skills and job-seeking techniques will be covered. Prerequisite: ADV 287 or ADV 288. Lab required. 3 credit hours.

ADV 296 Advanced Computer Illustration
More advanced work in computer illustration, including color. Prerequisite: ADV 292. Lab required. 3 credit hours.

ANTH 151 Cultural Anthropology
Utilizes the comparative method to examine the concepts of culture and society. The social and cultural beliefs and practices of people of diverse ethnic backgrounds are investigated and compared. Lab required. 3 credit hours.

ART

ART 190 Art Appreciation
Introduction to the visual arts. emphasizing the understanding and appreciation of art. 3 credit hours.

ART 191 Design I
Introduction to two-dimensional visual organization dealing with basic elements and principles of design. Exploration of black and white, color and a variety of media. The experience in this class will prepare the student for composition in painting, drawing and other two-dimensional courses. Lab required. 3 credit hours.

ART 192 Design II
A study of three-dimensional design problems. Prerequisite: ART 191. Lab required. 3 credit hours.

ART 193 Drawing I
An introduction to drawing including space, form, line, contour, gesture, texture, value and composition. The student will learn observational skills in order to render the subjects of still life, figure, perspective and landscape more accurately. Emphasis will be placed on technique, imagination and use of a variety of materials. Lab required. 3 credit hours.

ART 194 Drawing II
Continued study of space, form, line, contour, gesture, texture, value and composition in still life, figure. perspective and landscape. Use of color will be introduced in various media. Emphasis will be placed on imagination, technique, development of a personal drawing style and composition. Prerequisite: ART 193. Lab required. 3 credit hours.

ART 195 Problems in Contemporary Art
An introduction to current community resources in art including talks by area artists and educators in the field of fine art together with field trips to galleries, studios and museums. This course may be repeated for up to 3 credit hours. 1 credit hour.

ART 196 Design II Color Theory
Practical application of current color theories used in both fine arts and commercial art. Emphasis is on color perception and color psychology with exercises in transparent and opaque pigments, printing inks and color photography. Prerequisite: ART 191, 193. Lab required. 3 credit hours.

ART 249 Art for Elementary Educators
Art for elementary educators. Includes projects in drawing, painting, printing, crafts and sculpture. Lab required. 3 credit hours.

ART 281 Sculpture I
A study of three-dimensional form, including basic methods of modeling, construction and simple casting procedures. Prerequisite: ART 192. Lab required. 3 credit hours.

ART 282 Sculpture II
Application of the principles of three-dimensional form with an emphasis in creative expression. Prerequisite: ART 281. Lab required. 3 credit hours.

ART 283 Ceramics I
Introduction to ceramic design, including hand building, potter's wheel and glazing and firing techniques. Lab required. 3 credit hours.

ART 284 Ceramics II
Continuation of Ceramics I with further study in clay and glaze composition and kiln operation with an emphasis on creative expression. Prerequisite: ART 283. Lab required. 3 credit hours.

ART 285 Printmaking I
Introduction to the process of intaglio and reliefprinting. Prerequisite: ART 193. Lab required. 3 credit hours.

ART 286 Printmaking II
Continuation of Printmaking I with an emphasis on creative expression. Prerequisite: ART 285. Lab required. 3 credit hours.
**ART 291 Painting I**
Acrylics and oil. Introduction to painting including the use of materials, techniques. Color study and composition. Various painting styles will be practiced. Prerequisite: ART 193. Lab required. 3 credit hours.

**ART 292 Painting II**
Acrylics, oil and other media. Intermediate level course designed to increase the student's ability to use various techniques, color, and composition. Realistic and abstract approaches to painting will be explored. Emphasis will be placed on design, imagination, personal expression and painting style. Prerequisite: ART 291. Lab required. 3 credit hours.

**ART 293 Watercolor I**
Introduction to watercolor including instruction in the use of brushes, papers, materials, and various painting techniques on wet and dry paper. The student will gain experience in mixing colors, color methods, problem solving in the use of technique and in skillful observation of composition and painting style. Prerequisite: ART 193. Lab required. 3 credit hours.

**ART 294 Watercolor II**
Intermediate-level course designed to increase the student's ability to master technique to identify the different pigment properties of color and to determine their best use. Exploration of different tools, papers, materials and techniques will be practiced. Emphasis is on composition, imagination, personal expression and painting style. Prerequisite: ART 293. Lab required. 3 credit hours.

**ART 295 Art History I**
Survey of art history from prehistoric times to the Renaissance. Special consideration is given to the form and content of a work of art as well as the social and cultural context in which the work is created. 3 credit hours.

**ART 296 Art History II**
Survey of art history from the Baroque period to the present. Special consideration is given to the form and content of a work of art as well as the social and cultural context in which the work is created. 3 credit hours.

**ART 297 Life Drawing**
Drawing from the life model including instruction in anatomical and creative approaches to figure drawing. Emphasis is on personal expression and creativity. May be taken for up to six (6) hours credit. The second semester of work is more advanced than the previous semester. Prerequisite: ART 194. Lab required. 3 credit hours.

**ART 298 Fibers I**
Investigates the problems of two- and three-dimensional design with emphasis on individual expression and creativity based on loom and off-loom weaving techniques. Basic paper-making and elementary dyeing processes explored. Lab required 3 credit hours.

**ART 299 Fibers II**
Investigation of the creative and functional aspects of loom weaving; experience in the construction, warping, threading and manipulation of both standard and modern design techniques. Prerequisite: ART 298. Lab required. 3 credit hours.

**Biology**

**BIOL 151 Introduction to Biology I**
Survey of biology including molecular and cellular biology, genetics and the biology of plants and lower organisms. The cellular and molecular basis of life will be emphasized. Current topics in biology and medicine will be discussed. Students will meet three lecture hours/week, two lab hours/week and one recitation hour/week. Lab and recitation required. 4 credit hours.

**BIOL 152 Introduction to Biology II**
Continuation of Biology 151. The biology of plants and lower animals and humans will be studied, as well as organisms in nature, their ecology, ecosystems, behavior and evolution. Current topics in biology and medicine will be discussed. Students will meet three lecture hours/week, two lab hours/week and one recitation hour/week. Prerequisite: BIOL 151. Lab and recitation required. 4 credit hours.

**BIOL 153 Marine Biology**
Morphological, physiological and ecological adaptations of marine organisms to their environment. Prerequisite: BIOL 151 or 191. SCUBA certification and consent of instructor. BIOL 152 or BIOL 192 is preferred. Lab required, including week-long field trip to Cozumel, Mexico. 4 credit hours.

**BIOL 155 Human Anatomy and Physiology**
A one-semester course for non-science majors in the structure and function of the human body. Discussion of the body systems, including neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive and circulatory, will be accompanied by discussion of diseases of each system. Prerequisite: BIOL 151 or 191. Lab required. 4 credit hours.

**BIOL 191 General Biology I**
For science majors. Current knowledge in the fundamentals of biology. Will develop concepts in cellular structure and function from the molecular to the organism level with a study of genetics and plants and lower organisms. General topics covered include basic biochemistry, metabolism, energetics, cell structure and function; bacteria, viruses and lower organisms; and plant structure and function. Laboratory includes study of tissue types, cellular structure and function, physiological chemistry, and plant anatomy and physiology. Lab required. 4 credit hours.

**BIOL 192 General Biology II**
For science majors. Continuation of the study of biological systems, including animal organ systems, immunity; reproduction, development, diversity, inter- and intra-species behavior of animals, evolution and environment. The cellular and molecular basis of biology is emphasized. Dissections of invertebrates and a mammal are included. Laboratory correlates with lecture topics. Prerequisite: BIOL 191. Lab required. 4 credit hours.

**BIOL 264 Human Genetics**
A study of the principles of molecular and cellular genetics and the function and transmission of hereditary material with emphasis on the human. Medical applications include genetic diseases, genetic counseling and genetics as involved in cancer and other acquired diseases. Prerequisite: BIOL 192. May be taken concurrently with BIOL 192 if BIOL 192 has been completed. Credit will not be given for both BIOL 264 and BIOL 294. Lab required. 4 credit hours.

**BIOL 268 General Botany**
The study of structure and function of plant cells, tissues and organs. An evolutionary survey and life histories of representative groups: algae, fungi, mosses, liverworts, ferns and seed-producing plants. Plants' reproductive and functional interactions with their environment and with man will be included. Selected laboratory exercises will complement the lecture topics. Prerequisite: BIOL 192. May be taken concurrently with BIOL 192 if BIOL 192 has been completed. Lab required. 4 credit hours.

**BIOL 281 Invertebrate Zoology**
Classification, anatomy, physiology, ecology and evolutionary relationships of the invertebrate animals. Laboratory will be correlated with animals studied in lecture and will include observation and dissection of invertebrates. Prerequisite: BIOL 192. Lab required. 4 credit hours.

**BIOL 284 Vertebrate Zoology**
Classification, anatomy, physiology, ecology and evolutionary relationships of the vertebrate animals. Laboratory will be correlated with animals studied in lecture and will include observation and dissection of vertebrates. Prerequisite: BIOL 192. Lab required. 4 credit hours.

**BIOL 285 Vertebrate Zoology**
Classification, anatomy, physiology, ecology, development and natural history of the vertebrate animals with emphasis on comparative evolution. Prerequisite: BIOL 192. Lab required. 4 credit hours.

**BIOL 291 Anatomy and Physiology I**
A study of comparative structure and function of the mammalian system with emphasis on anatomy. Topics include cellular structure and function, tissues, skin, skeletal, muscular and nervous systems. The molecular aspects of cells and organisms are stressed. Laboratory section includes dissection of a mammal, as well as study of models, slides and charts correlating with lecture topics. Prerequisite: BIOL 151 or 191. BIOL 152 or 192 recommended. Lab required. 4 credit hours.
**BIOL 292 Anatomy and Physiology II**
Continuation of the study of the structure and function of the mammalian system with emphasis on physiology. Topics include genetics, digestion, nutrition, metabolism, respiratory systems, blood and cardiovascular system, endocrine system, lymphatic, urinary system, reproduction and human development. Laboratory includes correlated physiological experiments and continued mammalian dissection. Prerequisite: BIOL 291. Lab required. 4 credit hours.

**BIOL 293 Microbiology**
Principles of microbiology. Classification, cell structure, metabolism and historical concepts of microorganisms including bacteria, viruses, fungi, protozoa and rickettsia. Infectious diseases and immunology will be emphasized. Practical microbiology will include diagnostic microbiology of water, food, sewage, soil and industrial applications. Laboratory methods are stressed with emphasis on pure culture of medical, environmental and industrial importance are studied extensively. Prerequisite: BIOL 292 and BIOL 293. Lab required. 4 credit hours.

**BIOL 294 Genetics**
A study of the principles of classical and molecular genetics, and the function and transmission of hereditary material. Course content will include population genetics and genetic engineering, with special attention paid to human genetics and current research in genetics. Lab required. 4 credit hours.

**BIOL 700 Biology Internship**
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

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**BUSINESS ADMINISTRATION**

**BSAD 121 Introduction To Business**
Survey of business operations in a capitalistic economy including ownership, management, marketing, finance, and legal environmental factors. The role of business in society is studied. 3 credit hours.

**BSAD 122 Principles of Management**
Process of management is examined. The functions of planning, organizing, leading and controlling are covered. Emphasis is on management philosophy, decision making, policy formulation, communications and motivation. Lab required. 3 credit hours.

**BSAD 123 Business Law**
General principles of the law of contracts, property and torts. The historical and ethical background of the law and current legal principles are covered. 3 credit hours.

**BSAD 124 Personal Finance**
Personal financial issues are covered. Topics include financial planning, insurance, budgeting, credit, income tax, and savings. Lab required. 3 credit hours.

**BSAD 125 Supervisory Management**
Designed to instill the principles of supervisory management and the management of the workplace. Topics include management principles, human relations, motivation, communication, and leadership. Lab required. 3 credit hours.

**BSAD 221 Principles of Marketing**
The scope and structure of marketing are examined. Marketing functions, consumer behavior, market research, sales forecasting and relevant state and federal laws are analyzed. 3 credit hours.

**BSAD 222 Personnel Management**
Study of principles and procedures in the management of employees. Topics include selection, placement, compensation, working conditions, training, labor relations and government regulations. Prerequisite: BSAD 121. BSAD 222 or SBMT 121. 3 credit hours.

**BSAD 223 Principles of Retailing**
The operation of the retail system of distribution is examined. Topics include consumer demand, location and layout, credit practices and computer use. 3 credit hours.

**BSAD 224 Principles of Advertising**
Introduction to the principles, practices and media of persuasive communication. Topics include buyer behavior, use of media and methods of stimulating salespeople and retailers. Promotion programs are also covered. 3 credit hours.

**BSAD 225 International Business**
Introduction to international trade. Overview of managerial, financial and marketing issues for the operation of small or large firms in or entering world trade. Problems of adaptation to different sociological, legal, political and economic characteristics are emphasized. 3 credit hours.

**BSAD 226 Sales Management**
Study of the principles of the management of personal selling. Attention is given to personal qualifications and training programs. Topics include buying motives, sales psychology, sales techniques and management of sales personnel. Lab required. 3 credit hours.

**BSAD 228 Organizational Behavior**
Human problems of administration in modern organizations are examined. The theory and methods of behavioral science as they relate to organizations are included. Lab required. 3 credit hours.

**BSAD 231 Labor Management Relations**
Organized labor and management organizations are examined. Topics include labor union development, legislative acts, legal considerations, labor-management relationships and collective bargaining. Lab required. 3 credit hours.

**BSAD 244 Selected Topics in Business Principles**
Provides an overview of business operations, develops a business vocabulary and directs the thinking of each student to the field of business best suited to his/her interest and talent. Subject matter includes an analysis of the specialized fields within the business organization and of the role of business in modern society. Topics may vary from semester to semester. Course may be repeated for credit as topics change. 3 credit hours.

**BSAD 700 Cooperative Education I**
A comprehensive treatment of career related activities encountered in the student’s area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of instructor. 3 credit hours.

**BSAD 705 Cooperative Education II**
A comprehensive treatment of career related activities encountered in the student’s area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: Consent of instructor. 3 credit hours.

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**COMPUTER AIDED DESIGN**

**CAD 151 Technical Graphics I**
Use of instruments. applied geometry, engineering lettering. orthographic projections, dimensioning pictorial drawing and sketching, sectional views and working drawings. Lab required. 3 credit hours.

**CAD 152 Technical Graphics II**
A continuation of Technical Graphics I. This course covers working detail drawings with proper dimensioning and tolerances. Standard symbols. stock shapes and descriptions are wvered and applied to fabrication and forming drawings. Prerequisite: CAD 151. Lab required. 3 credit hours.
**CAD 153 Computer Aided Drafting**
Capabilities and limitations of the electronic computer as an aid to the designer are studied. Drafting procedures using an interactive system with computer graphics are practiced. Forms and uses of computer aided products are viewed in perspective with the overall design and documentation process. Prerequisite: CIS 121. Lab required. 3 credit hours.

**CAD 220 Technical Illustration**
Applications of computer graphics in the field of technical illustrations. Students will learn how to produce axonometric and perspective drawings on a CAD system, which will be suitable for use in such areas as desktop publishing, commercial advertising and technical publications. Concepts in animation, rendering and 3-D modeling will be introduced. Prerequisite: CIS 121 or CAD 153. Lab required. 3 credit hours.

**CAD 221 Computer Aided Design**
An advanced course in design applications. Students will complete actual design projects in the architectural, mechanical, civil, electronics, graphics, or manufacturing fields of study. Prerequisite: CAD 153. Lab required. 3 credit hours.

**CAD 224 Advanced Computer Aided Drafting**
Advanced uses of the electronic computer as an aid to the designer are studied. Special emphasis is given to three-dimensional design. Specifically mechanical. Menu and library construction will be practiced while using the interactive graphic system. Prerequisite: CAD 153. Lab required. 3 credit hours.

**CAD 231 Electronic PCB Drafting**
Focuses on drawings used in the electronics industry. Topics include. block and logic diagrams, schematic diagrams, interconnecting wire diagrams, taping printed circuit boards, integrated circuits, component packaging and current practices. Lab required 3 credit hours.

**CAD 232 Descriptive Geometry**
Study of points, lines and planes in space with application of various technologies. Prerequisite: CAD 152. Lab required. 3 credit hours.

**CAD 235 Manufacturing Processes**
Study of the characteristics of industrial materials and the processes employed in their conversion. The topics covered are sheet metal, machined parts and castings. Prerequisite: CAD 152. Lab required. 3 credit hours.

**CAD 236 NC Programming**
NC Programming will provide students with basic conceptual knowledge about the fundamentals of NC Programming and basic understanding of various NC Programming languages. Prerequisite: CAD 235. Lab required. 3 credit hours.

**CAD 237 Computer Integrated Manufacturing**
Systematic introduction of the aspects of Computer Integrated Manufacturing technology. This course includes software examples, practical case studies and simulation techniques. Prerequisite: CAD 235. Lab required. 3 credit hours.

**CAD 240 Printed Circuit Design**
This course develops skills in the design of double-sided and multi-layer printed circuit boards. Students design boards from schematics, parts lists and manufacturing specifications. Some boards are designed for manual parts insertion and taped artworks. Others are designed for automatic parts insertion and digitized inputs for artwork. Prerequisite: CAD 231. Lab required. 3 credit hours.

**CAD 243 Advanced Printed Circuit Board Design**
Continuation of CAD 240. Students will be designing power supply boards, shielding and denser PCB designs. Multi-layer board design concepts will be introduced. Prerequisite: CAD 240, CAD 153. Lab required. 3 credit hours.

**CAD 255 Applications in PCB Design**
Advanced topics in PCB technology to include surface mount and microwave circuit design together with new advancements in technology. Prerequisite: CAD 243. Lab required. 3 credit hours.

**CAD 700 Cooperative Education I**
A course designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. 4 credit hours.

**CAD 705 Cooperative Education II**
A course designed to integrate on-campus classroom study with hands-on work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. Prerequisite: CAD 705W. 4 credit hours.

**CAD 710 Cooperative Education III**
A course designed to integrate on-campus, classroom study with hands-on work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Approval by instructor. Prerequisite: CAD 706. 4 credit hours.

**CHILD DEVELOPMENT**

**CHDV 151 Childhood Development (0-3 yrs.)**
Comprehensive study of growth and development from conception through three years of age. Emphasis on cognitive, language, emotional and social development. Lab required. 3 credit hours.

**CHDV 152 Early Childhood Development (3-5 yrs.)**
Comprehensive study of growth and development from three years through five years of age. Emphasis on cognitive, physical, emotional and social development. Lab required. 3 credit hours.

**CHDV 153 Early Childhood Programs and Services**
Study of appropriate learning experiences for young children in a variety of child-care environments. Emphasis on quality environments, learning activities and effective teaching techniques. Lab required. 3 credit hours.

**CHDV 154 Nutrition, Health and Safety**
Practical experience and information on the nutritional, health and safety needs of the young child. Students earn first aid and CPR certificates during this course. Lab required. 3 credit hours.

**CHDV 155 Material and Activities Development I**
Language Arts, Pre-reading, Computers and Math: Techniques and materials for the progress of each child in language arts, reading and math concepts for appropriate stages of their cognitive development. Lab required. 4 credit hours.

**CHDV 156 Material and Activities Development II**
Nature, World of People and the Arts: The interrelationships among science, social science and creativity in the arts is studied as it applies to the total development of the young child. Activities, content, methods and materials are explored. Lab required. 4 credit hours.

**CHDV 157 Practicum A**
Application of learning experiences through participation as an assistant teacher or assistant administrator in the Child Development Laboratory School. Prerequisite or corequisite: CHDV 155 or CHDV 156. 4 credit hours.

**CHDV 158 Practicum B**
Advanced application of learning experiences involving increased responsibility for teaching or administration in the Child Development Laboratory School or in an approved early childhood facility such as a registered family day home, licensed child care center, or an accredited school. Prerequisite: CHDV 157. Permission of instructor required. Lab required. 3 credit hours.
CHDV 159 Infant and Toddler Materials and Activities Development
Appropriate experiences for infants and toddlers including learning activities, materials and teaching techniques. Prerequisite: CHDV 151. Lab required. 3 credit hours.

CHDV 160 Child Development (5-12 yrs.)
Comprehensive study of growth and development from 5 through 12 years of age. Emphasis on cognitive, language, emotional and social development. Lab required. 3 credit hours.

CHDV 161 Early Childhood Fundamentals
Introduction to early childhood education, with an emphasis on the development of observation skills. Content includes methods for observation and recording of data, interpreting information and planning for children based on observations. The importance of children’s play is emphasized. Lab required. 3 credit hours.

CHDV 251 Child Guidance
Study of effective methods of guiding young children, with emphasis on developing a positive self-concept, recognizing individual differences, varied family situations and various crisis situations. Includes observations and interpretations of case studies of young children. Lab required. Prerequisite: CHDV 151, CHDV 152, CHDV 161, or permission of instructor. 3 credit hours.

CHDV 252 Child Abuse Prevention
Focuses on the causes and symptoms of abusive behavior. Emphasis on developing skills and competencies for working with the abused child and families to help alleviate abusive experiences. Lab required. 3 credit hours.

CHDV 253 Administrative Early Childhood Programs
Business administration procedures for early childhood programs are studied. Topics include food, health, personnel practices, budgeting, record keeping, legal procedures and use of the computer. Lab required. 3 credit hours.

CHDV 254 Organization and Management of Early Childhood Programs
Organization and management procedures are studied. Topics include philosophy of early childhood education, organizational goals, staffing policies and training plans, facility planning and design, program management and evaluation. Lab required. 3 credit hours.

CHDV 255 Internship
Supervised teaching or administrative experience in an approved program or service agency for young children and their families. Prerequisite: permission of instructor. Lab required. 3 credit hours.

CHDV 256 Cooperative Education
A comprehensive treatment of career related activities encountered in the student’s area of specialization. Under supervision of the college and the employer, the student combines classroom learning with work experience. Prerequisite: permission of instructor. 3 credit hours.

CHDV 257 Parents and the Care Giver
Explores relationships between care givers and parents of young children. Focuses on parental involvement, effective relationship building techniques and communication skills. Prerequisite: CHDV 151 or CHDV 152, or CHDV 251 or permission of instructor. Lab required. 3 credit hours.

CHDV 258 Selected Topics in Child Development
Current topics in the field of Child Development will be studied. May be repeated for credit as topics vary. Lab required. 1 credit hour.

Chemistry
Chemistry 151 Introduction to Chemistry
A laboratory, lecture and recitation program designed for non-science majors. Studies include the metric system, scientific calculations, states of matter, chemical equations, atomic theory. bonding theory and introductory qualitative chemistry. One hour recitation session develops methods of problem solving. Laboratory exercises reinforce concepts presented in lecture. Prerequisite: high school algebra or equivalent. Lab and recitation required. 4 credit hours.

Chemistry 152 Introduction to Chemistry II
A laboratory, lecture and recitation program designed for science majors. This survey course is a continuation of CHEM 151 and includes the study of acids and bases, solution chemistry, nuclear chemistry, kinetics, organic chemistry and biochemistry. Prerequisite: CHEM 151. Lab and recitation required. 4 credit hours.

Chemistry 191 General Chemistry I
A classical chemistry course designed for science majors, pre-medical, dental, or engineering students. Topics include stoichiometry, ideal gas behavior, atomic theory, periodic trends, VSEPR theory, thermochemistry, bonding theory and states of matter. Laboratory experiments demonstrate concepts presented in class and develop basic lab skills. Prerequisite: 1 year of high school chemistry or CHEM 151; MATH 181. Lab and recitation required. 4 credit hours.

Chemistry 192 General Chemistry II
A continuation of Chemistry 191 that addresses topics in chemical equilibrium, acid-base theory, solubility, electrochemistry, nuclear chemistry, organic chemistry and biochemistry. Laboratory exercises demonstrate concepts presented in lecture and develop more advanced lab methods. Prerequisite: CHEM 191. Lab and recitation required. 4 credit hours.

Chemistry 193 Biochemistry
Biochemistry is a seminar course for science majors exploring topics of catalysis and anabolism with excursion into areas of current biochemical investigations. Prerequisite: BIOL 191 or CHEM 191. Lab required. 1 credit hour.

Chemistry 291 Organic Chemistry I
Study of organic chemistry that considers covalent bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional group and introductory synthesis. Laboratory experiments develop organic techniques and reinforce lecture material. Prerequisite: CHEM 192. Lab and recitation required. 4 credit hours.

Chemistry 292 Organic Chemistry II
A continuation of Chemistry 291 that includes methods of structural analysis, advanced synthesis, methods of purification, biochemistry and organometallic topics. Laboratory experiments emphasize techniques in synthesis, purification, and analyses, and reinforce lecture material. Prerequisite: CHEM 291. Lab and recitation required. 4 credit hours.

Chemistry 700 Chemistry Internship
Designed to integrate on-campus and off-campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Computer Information Systems
CIS 121 Computer Graphics Systems
Basic computer systems used in drafting and design applications. Hardware and software operations including booting, displays, files, commands, defaults, input-output, disks, printers, plotters, precision, utilities and data bases. 3 credit hours.

CIS 128 Microcomputer Concepts
Provides students with a working knowledge of microcomputers with applications for personal, professional and business use. An introduction to disk operating systems, spreadsheets, database management and word processing is given. Lab required. 3 credit hours.

CIS 130 Basic Programming
This course is designed to provide a comprehensive understanding of fundamental programming logic. The student is required to write several business-oriented programs in BASIC. System analysis, structured design, flowcharting and other fundamental terms and concepts of hardware and software are introduced. Prerequisite: CPSC 150. Lab required. 3 credit hours.
CIS 140 RPG Programming
Provides a comprehensive understanding of programming digital computers using Report Program Generator language. Proficiency is developed as students design, code, compile and debug RPG programs. Lab required. 3 credit hours.

CIS 200 COBOL I
Presents structured program design, development, testing, implementation and documentation of common business applications using COBOL. Syntax, data and file processing, batch and interactive modes are covered. The student is required to write several COBOL programs. Prerequisite: CIS 130. Lab required. 3 credit hours.

CIS 205 COBOL II
Continuation of CIS 200 with emphasis placed on advanced techniques, disk accessing and storage, direct and sequential access, and input/output. Programs studied are more complex and varied and are designed to employ all features available on the computer. Prerequisite: CIS 200. Lab required. 3 credit hours.

CIS 210 DATA Structures for Business
This course emphasizes the file structure to solve business problems. The student will use the language BASIC to develop methods of searching and sorting sequential and direct access file systems. Concepts of stacks, queues, the linked list, and data collision and resolution techniques will be applied to business data files. Prerequisite: One programming language. Lab required. 3 credit hours.

CIS 220 INTEGRATED Spreadsheet Applications
Introduces the use of integrated spreadsheet applications to define, analyze and solve business problems. Using LOTUS 1-2-3 by Lotus Development Corp., the student will be required to produce spreadsheets, database, word processing and graphics documents. Prerequisite: CPSC 150 or CIS 128, ACCT 191, or consent of instructor. Lab required. 3 credit hours.

CIS 222 SYSTEMS Analysis and Design
Techniques of documentation, information gathering, systems flowcharting, the design, classification and coding of records, data controls, and file organization. The basic techniques of business systems analysis and design are applied to an ongoing case study. Prerequisite: One programming language. Lab required. 3 credit hours.

CIS 224 INFORMATION Systems Management
Designed to solidify and update the student’s quantitative and qualitative (high-tech, high-touch) managerial skills. Current theories, capabilities, applications, benefits, liabilities and economics of management information systems are presented. Computer-based decision support systems are emphasized. The student is required to lead and participate in groups to define, analyze, solve and present management information systems case studies. Prerequisite: One programming language. Lab required. 3 credit hours.

CIS 225 Desktop Publishing
Use of the computer to produce printed communications using commercially available desktop publishing software. To demonstrate proficiency, the student will be required to produce several projects. Prerequisite: CIS 128, OFAD 223. Lab required. 3 credit hours.

CIS 230 DATABASE Applications
The concepts and techniques for solving business problems using dBASE III+ by Ashton-Tate Corp. are presented. The structure of the database, custom reports, labels, custom screens, number and text handling, and file management are used to produce several on-demand business documents from the database. Prerequisite: One programming language. Lab required. 3 credit hours.

CIS 235 Networking and Telecommunications
This course reviews data, text, graphics and voice communications technology and their applications. Included is vocabulary, configuration of local networks, modems, rates and standards. An overview of protocols is given. Prerequisite: CIS 226 or CPSC 150, or consent of instructor. Lab required. 3 credit hours.

CIS 245 Computer Operating Systems
Focuses on the study of data files. Major topics include creating, editing and managing data files; path directory structure; operating system commands, and job control language. Lab time will be spent working with current operating systems such as MS-DOS, OS/2, UNIX and VAX-VMS. Co-requisite: CPSC 150 or CIS 128. Lab required. 3 credit hours.

CIS 247 Selected T o p i c s in Computer Information Systems I
Current developments in the rapidly changing field of computer information systems are studied. May be repeated when topics vary. Prerequisite: Will vary based on topics covered and will be annotated in each semester’s class schedule. Lab required. 3 credit hours.

CIS 298 Selected Topics in Computer Information Systems II
Current developments in the rapidly changing field of computer information systems are studied. May be repeated when topics vary. Prerequisite: Will vary based on topics covered and will be annotated in each semester’s class schedule. Lab required. 3 credit hours.

CIS 700 Cooperative Education
This course is designed to help the student integrate classroom knowledge with the work experience. The student, the student’s supervisor and the instructor coordinate a set of goals for the student to accomplish. Requires the student to attend a 1 hour weekly seminar. 3 credit hours.

COMM 150 Survey of Recording Techniques I
Introduction to the concepts and techniques of audio recording including operation of recording equipment, session procedures, simultaneous recording and multi-track recording. Lab required. 3 credit hours.

COMM 151 Survey of Recording Techniques II
Continuation of COMM 150, studying advanced recording studio techniques and practical application of basic skills. Prerequisite COMM 150, Lab required. 3 credit hours.

COMMUNICATION

CIS 123 Introduction to System Software Architecture
Introduction to system-level operations, booting, compilers, translators, linkers, loaders, system control and runtime software. Laboratory examples assigned to reinforce principles. Prerequisite: CPSC 150. Lab required. 3 credit hours.

CIS 135 C Programming
An introduction to fundamental high-level programming using the C programming language. Prerequisite: CPSC or knowledge of one programming language. Lab required. 3 credit hours.

CPC 150 Introduction to Computers
Study of basic hardware components and major software applications. Topics emphasized in labs include introduction to DOS commands, WordPerfect, dBASE III+, Lotus 1-2-3 and elementary programming using BASIC language. Lab required. 3 credit hours.

CPC 190 Programming Concepts
Study of logical operation and organization of a computer, number systems, Boolean algebra, problem solving techniques, algorithmic processes and top-down design using the PASCAL language. Co-requisite: MATH 181, CPSC 150 or consent of instructor. Lab required. 3 credit hours.
CPSC 191 PROGRAMMING CONCEPTS II
Continuation of Computer Science 190, including structured programming, design, data structures, documentation and testing. Emphasis on creating and modifying larger programs. Prerequisite: CPSC 190. Lab required. 3 credit hours.

CPSC 213 DATA STRUCTURES
An in-depth study of C language using records, variant records, enumerated data types, pointers, arrays, records, list processing, trees, stacks, queues, abstract data types, searching, sorting, linked lists, graphs, traversals and recursion. Co-requisite: CPSC 193. Lab required. 3 credit hours.

CPSC 211 SOFTWARE ENGINEERING
Study of software design, implementation, validation techniques through team projects. Structured analysis, programming style and project documentation are emphasized in software projects large enough to give a group meaningful work experience. Lab required. 3 credit hours.

CPSC 223 REAL TIME PROGRAMMING
Analysis of distributed networks containing minicomputers. Study of data acquisition and digital control environments. Prerequisite: CPSC 190. Lab required. 3 credit hours.

CPSC 224 SOFTWARE TECHNIQUES
Introduction to software testing methodologies. Emphasis on program development techniques which aid testing. Introduction to proof of correctness. Laboratory exercises assigned to reinforce principles of program development. Prerequisite: CPSC 221. Lab required. 3 credit hours.

CPSC 225 ADA PROGRAMMING
Syntax and semantics of ADA language, packages, I/O, encapsulation, tasking, blocks, exceptions, private and generic types. Prerequisite: CPSC 191. Lab required. 3 credit hours.

CPSC 231 ADVANCED TOPICS IN COMPUTER SCIENCE
Selected topics in computer science and software development to address current issues. Topics may vary each semester. Cores may be repeated for credit as topics vary. Lab required. 3 credit hours.

CPSC 232 ADVANCED SOFTWARE ENGINEERING
Advanced study of large program design and documentation, group problems, software maintenance and reliability. Prerequisite: CPSC 221. Lab required. 3 credit hours.

CPSC 233 ADVANCED ASSEMBLY LANGUAGE PROGRAMMING
Program design and practice with assembly language, macros, subroutines, condition assembly, variables, linked lists, sorting, file processing. Prerequisite: CPSC 290. Lab required. 3 credit hours.

CPSC 235 LISP PROGRAMMING
Syntax and semantics of LISP programming language, style and recursion, tail recursion, algorithm development, data processing techniques. Prerequisite: CPSC 290. Lab required. 3 credit hours.

CPSC 236 INTRODUCTION TO ARTIFICIAL INTELLIGENCE
Introduction to concepts and ideas in artificial intelligence. Topics will include search techniques, knowledge representation, control strategies and advanced problem-solving architecture. Prerequisite: CPSC 235. Lab required. 3 credit hours.

CPSC 290 ASSEMBLY LANGUAGE
Study of the architecture of the computer through the use of assembly language programming. Includes study of registers, instruction sets, addressing techniques, machine execution traces, table searching, sorting, file I/O, program linking and macros. Prerequisite: CPSC 191. Lab required. 3 credit hours.

CPSC 292 SCIENTIFIC PROGRAMMING
Introduction to numerical techniques with applications in science and engineering using FORTRAN. Emphasis on program design and documentation. Topics include subroutines, file processing and subroutines. Prerequisite: MATH 182. Lab required. 3 credit hours.

CPSC 293 PUI PROGRAMMING
Introduction to PUI programming with emphasis on the structured approach to program design. Topics include loop, array, function, structure, bit operations, recursion, arithmetic, mathematical and business applications. Prerequisite: CPSC 191. Co-requisite: MATH 181; CPSC 150. Lab required. 3 credit hours.

CPSC 294 ADVANCED PROGRAMMING WITH C
Study of C programming language with emphasis on structured approach to program design and documentation. Topics include loop, array, function, structure, and bit operations, recursive algorithms, arithmetic applications. Prerequisite: CPSC 290 or consent of instructor. Lab required. 3 credit hours.

CRIMINAL JUSTICE

CRJS 151 CRIME IN AMERICA
American crime problems in historical perspective; social and public policy factors affecting crime; impact and crime trends; social characteristics of specific crimes; prevention of crime. 3 credit hours.

CRJS 152 INTRODUCTION TO CRIMINAL JUSTICE
Overview of criminal justice system from historical and philosophical perspectives: law enforcement, courts and corrections. Emphasis on definitions of crime and defenses, scope of impact of crime, 4th and 5th Amendments, trial process. 3 credit hours.

CRJS 153 FUNDAMENTALS OF CRIMINAL LAW
Study of the nature of criminal law; philosophical and historical development; major definitions and concepts; classification of crime; elements of crimes and penalties using Texas statutes as illustrations; criminal responsibility. 3 credit hours.

CRJS 154 THE COURTS AND CRIMINAL PROCEDURE
Study of processing criminal cases through the criminal system with emphasis on Texas Code of Criminal Procedure and rules of evidence. Also, right to counsel, pretrial process, grand juries. 3 credit hours.

CRJS 700 CRIMINAL JUSTICE INTERNSHIP
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

ECON 121 INTRODUCTION TO ECONOMICS
Study of economics of current issues including trusts, regulation, social security, labor and the banking system. Also included are the purpose, functions and results of a capitalistic system. 3 credit hours.

ECON 291 PRINCIPLES OF ECONOMICS - MACRO
Principles of macroeconomics. Topics include supply and demand, economic organization, national income determination, money and banking, monetary and fiscal policy, economic fluctuations and growth. 3 credit hours.

ECON 292 PRINCIPLES OF ECONOMICS - MICRO
Principles of microeconomics. Topics include theory of demand, supply and price, income distribution, theory of the firm, international economics and contemporary economic problems. 3 credit hours.

EATING DISORDERS

EDCC 221 A SURVEY OF EATING DISORDERS
Studies the history, dynamics, prevalence, symptoms and treatment approaches to eating disorders. Examines biological, psychoanalytic, behavioral, cognitive and other theoretical perspectives. 3 credit hours.
EDCC 222 TREATMENT MODALITIES OF EATING DISORDERS
An in-depth study of the dominant approaches to treating eating disorders including diagnosis, assessment, various forms of psychotherapeutic as well as other interventions employed, and clinical issues encountered in treatment. Prerequisite: EDCC 221. 3 credit hours.

EDCC 223 MEDICAL ASPECTS OF EATING DISORDERS
Analyzes the physiology of obesity, anorexia nervosa and bulimia nervosa, focusing on predisposition, medical complications and differential diagnosis. Explores medical, nutritional and dental treatment approaches employed in conjunction with psychological treatment. Prerequisite: EDCC 221. 3 credit hours.

EDCC 224 INDIVIDUAL COUNSELING
Presents an introduction to interviewing, history-taking, care-giving, listening, intervention and interpretation skills. Includes experience under supervision. Prerequisite: PSYC 151. 3 credit hours.

EDCC 225 GROUP PROCESSES
Introduces the patterns and dynamics of small group interaction, communication styles, impact of group processes on the individual, curative factors of group therapy and effective approaches to facilitation of groups. Includes experience under supervision. Prerequisite: PSYC 151. 3 credit hours.

EDCC 226 PRACTICUM
Helps the student integrate classroom knowledge with work experience. In-depth observation and participation experiences under supervision will be conducted at appropriate treatment facilities and hospitals. Prerequisite: EDCC 222 and permission of instructor. Lab required. 3 credit hours.

ELECTRONICS ENGINEERING TECHNOLOGY

EET 150 AC/DC FUNDAMENTALS
Provides a systems approach to electricity/electronics and concerns itself with vocabulary, definitions of electrical/electronic circuits, components and systems. An introduction to printed circuit board design, preparation, processing will be covered, including hook-up wiring and interconnection techniques. Lab required. 4 credit hours.

EET 151 CIRCUIT ANALYSIS I
Introduction to design principles of electrical/electronic direct current circuits. The course will cover division principles and various analysis techniques for analyzing different circuits. Node analysis, Superposition, KVL, KCL, Thevenin equivalent, Norton equivalent and the Millman equivalent theorems are utilized. This course is an applied mathematics course and includes Cramer’s rule. Prerequisite: EET 150, MATH 181. Lab required. 4 credit hours.

EET 152 CIRCUIT ANALYSIS II
Continuation of Circuit Analysis I. The information from the first semester course will be applied to alternating current circuits. Additional topics covered for AC circuits are: the effects of frequency and impedance: resonant circuit characteristics and filter networks; troubleshooting techniques; coupling networks, transformers. Utilization of standard phase notation and application of fundamental laws and theorems for network analysis is covered. Prerequisite: EET 151, MATH 182 or concurrent enrollment in MATH 182. Lab required. 4 credit hours.

EET 153 DIGITAL I.C. ANALYSIS
Indepth course in digital circuit analysis, theory, design and troubleshooting. Topics include: numbering systems and codes, logic elements, synchronous sequential logic, IC architecture, chip survey applications, design of memory systems, A/D and D/A converters and survey of peripherals. Prerequisite: EET 152. Lab required. 4 credit hours.

EET 154 FUNDAMENTALS OF COMPUTERS
Study of microprocessors; how they operate, how they are used, how they are programmed and how they relate to their equipment. Topics include: memories, microprocessor architecture, input/output operations, bus operations, control, execution cycles and bootstrap procedures. Prerequisite: EET 153. Lab required. 4 credit hours.

EET 250 CIRCUIT ANALYSIS III
The analysis and design of linear devices are studied. While emphasizing their circuit applications. Specifications and limits of voltage, current and heat-dissipation are included. Circuits covered include amplifiers, regulators, oscillators, filters, timers and signal processors. Prerequisite: EET 152. Lab required. 4 credit hours.

EET 251 COMPUTER INTERFACING
Microcomputer interfacing and the use of programmable peripheral devices. Selected programmable interface devices will be studied and the software and hardware interfaces developed. Experience in testing and troubleshooting interface circuits and use of specialized logic analyzer and emulation systems will be provided in a laboratory setting. Prerequisite: EET 154. Lab required. 3 credit hours.

EET 252 COMPUTER MAINTENANCE
Emphasis on the distinction between hardware and software failures in a computing system. This determination will be made in a lab setting using equipment with simulated or actual failures. Concentration is on the use of factory supplied and technician written diagnostic programs to identify and isolate a faulty device or subsystem. Prerequisite: EET 154. Lab required. 4 credit hours.

EET 253 MICROWAVE FUNDAMENTALS
Introduction to microwave theory and applications, transmitter and receiver. Prerequisite: EET 250. Lab required. 3 credit hours.

EET 254 TELECOMMUNICATIONS
Topics include: circuit and system application necessary to implement signals protocols, conversion systems, formats, loop starts. E & M, DX (duples) and looping systems, telephone set public switched networks, local exchanges, networks, two and four wire systems, tip and ring requiring equipments, and digital transmission techniques. Prerequisite: EET 250. Lab required. 4 credit hours.

EET 700 COOPERATIVE EDUCATION I
A course designed to integrate campus classroom study with off campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. 4 credit hours.

EET 705 COOPERATIVE EDUCATION II
A course designed to integrate off campus classroom study with campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: EET 700. 4 credit hours.

ELECTRONIC TECHNOLOGY

ELT 110 ELECTRONIC FUNDAMENTALS
Introductory course recommended for non-electronics majors in areas such as manufacturing, marketing and sales. The course provides the student with a knowledge of vocabulary, definitions, component identification and applications for electrical/electronics systems. Lab required. 3 credit hours.

ELT 111 BASIC ELECTRONICS I
Overview of terminology, concepts, devices and basic laws of direct current and alternating current. RC time constants, AC generation, parameter conversions and basic laws are presented. The laboratory will provide enhancement to applying AC theory to practice. Prerequisite: EET 111 or equivalent course. Lab required. 4 credit hours.

ELT 112 BASIC ELECTRONICS II
Overview of the terminology, concepts, devices and basic laws applied to alternating current. RC time constants, AC generation, parameter conversions and basic laws are presented. The laboratory will provide enhancement to applying AC theory to practice. Prerequisite: EET 111 or equivalent course. Lab required. 4 credit hours.
ELT 113 ELECTRONIC FABRICATION |  A basic course in electronic assembly. Topics include component identification, schematic diagrams, soldering principles, wire preparation and harness assembly, terminal connections, inspection and quality control. Lab required. Prerequisite: ELT 111. 4 credit hours.

ELT 114 SOLID STATE DEVICES |  Survey of solid state devices and their associated circuitry. Presents the fundamentals of common electronic circuits which contain integrated circuits and elements of solid state devices from the point of the PN junction through the function of integrated circuits. Prerequisite: ELT 111. Lab required. 4 credit hours.

ELT 115 BASIC DIGITAL |  Basic digital logic, its symbology and notation in terms of digital integrated circuits (IC’s), logic gates, flipflops, decoders, numbering systems and Boolean algebra. Prerequisite: ELT 111. Lab required. 4 credit hours.

ELT 207 FUNDAMENTALS OF ELECTRONIC COMMUNICATIONS |  Overview of the systems and circuits involved in electronic communication. Topics include: radio, television, satellite, microwave, fiber optics and lasers in theory and application. Integrated circuits will be emphasized. Prerequisite: ELT 111. Lab required. 4 credit hours.

ELT 208 ACTIVE DEVICES |  Semiconductors (active devices) include composition, parametered, linear and non-linear characteristics, in circuit action, amplifiers, rectifiers and switching. Prerequisite: ELT 114 or concurrent enrollment in ELT 114. Lab required. 4 credit hours.

UT 209 INSTRUMENTATION AND TELEMETRY |  Operation and use of meters, counters, oscilloscopes. Signal generators and test sets which are utilized in electronic circuit fault isolation and measurement. Prerequisite: ELT 208. Lab required. 3 credit hours.

ELT 210 DIGITAL CONTROL APPLICATIONS |  Digital principles as applied to microcomputer systems. Logic design. Computer structure and organization. Number systems conversion, busing and interfacing. Co-requisite: ELT 115. Lab required. 3 credit hours.

ELT 211 POWER SUPPLY SYSTEMS |  Theory and operation of linear and switching power supplies. Topics covered will be waveform analysis to include pulse characteristics and pulse train measurements, full-wave rectification, filtering and regulation. Prerequisite: ELT 208. Lab required. 3 credit hours.

ELT 212 APPLIED ELECTRONIC CIRCUITS |  Electronic circuit applications with considerations in areas of high speed EMT; high speed switching, coupling and decoupling circuits. Transmission modes, noise source and types, trans-conductive measurement techniques. Prerequisite: ELT 114. Lab required. 4 credit hours.

ELT 213 COMPUTER ARCHITECTURE |  Tri-state output circuits. Added detail to flip-flops and integrated circuitry, magnetic bubble storage, charge coupled devices, semiconductor memories. A micro-programmed version of BLUE will be discussed to illustrate this important design tool. Also brief discussion of STARAN, ILLIAC IV and the hypercube machines as examples of array processors. Prerequisite: ELT 115. Lab required. 4 credit hours.

ELT 214 APPLIED COMPUTER PROGRAMMING |  Computer programming techniques using Fortran or BASIC to solve problems and demonstrate system operation. The language syntax, flowcharting and coding with applications to technical projects is emphasized. Prerequisite: ELT 208. Lab required. 4 credit hours.

ELT 215 MICROCOMPUTER SYSTEMS |  Microcomputer interfacing and the use of programmable peripherals. Selected programmable interface devices will be studied and the software and hardware interfaces developed. Experience in testing and troubleshooting interface circuits will be provided in a laboratory setting. Specialized logic analyzer and emulation systems will be utilized. Prerequisite: ELT 213 or equivalent course. Lab required. 3 credit hours.

ELT 216 OPTOELECTRONICS |  A comprehensive course on the theory and application of optical electronic devices, circuits and fiber optics as they apply to industrial control, data transmission and telecommunications. Prerequisite: ELT 212. Lab required. 4 credit hours.

ELT 700 COOPERATIVE EDUCATION |  A course designed to integrate on campus classroom study with off campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. 4 credit hours.

ELT 705 COOPERATIVE EDUCATION |  A course designed to integrate on campus classroom study with off campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: ELT 700. 4 credit hours.

EMERGENCY MEDICAL TECHNOLOGY

EMTP 121 INTRODUCTION TO EMERGENCY CARE |  Overview of emergency medical care systems, including historical, state-of-the-art and future perspectives. Legal and ethical issues and responsibilities of emergency care responders are covered. Included as well is training in emergency care. Students successfully completing the course will be eligible to take the State Examination for certification as Emergency Care Attendant (ECA). Lab required. 3 credit hours.

EMTP 141 EMERGENCY MEDICAL PROCEDURES |  Successful completion of this course qualifies a student to take the State Examination for Emergency Medical Technician (EMT) certification. Includes classroom, clinical and ambulance training. Topics include anatomy and physiology, extraction and management of injured patients, cardiopulmonary resuscitation (CPR), bleeding control and pneumatic anti-shock garments (MAST). Lab and clinical required. 5 credit hours.

EMTP 149 EMERGENCY MEDICAL DISPATCH |  This course is designed to familiarize and equip communications personnel to give medical advice over the telephone while emergency responders are en route to the scene. Lab required. 3 credit hours.

EMTP 211 SPECIAL SKILLS TRAINING |  Successful completion of EMTP 211 qualifies a student to take the state examination for EMT-Special Skills certification. In addition, this course is part of a sequence of courses (EMTP 211, 221, 231) designed to qualify a student to take the state examination for Advanced EMT (Paramedic). This course introduces the student to skills required for providing Advanced Life Support (ALS). All areas of EMT training are reviewed. In addition, Department of Transportation (DOT) EMT-Advanced Course Modules I, II and V are covered. Prerequisite: EMT CERTIFICATE. Lab and clinical required. 5 credit hours.

EMTP 221 PARAMEDIC PROCEDURES |  One of a series of courses (EMTP 211, 221, 231) designed to prepare the successful student to take the state examination for Advanced EMT (Paramedic) Certification. Department of Transportation (DOT) Modules IV and VII are covered in this course including general pharmacology and the central nervous system. Prerequisite: EMT CERTIFICATION. Lab and clinical required. 3 credit hours.

EMTP 225 PHARMACOLOGY |  Designed to train emergency medical responders to prepare and administer emergency medicines safely and therapeutically. Mathematics of medications, preparation and administration of medication, therapeutic effects of drugs, side effects of drugs, toxic effects of drugs, drug interactions and contraindications are included. Prerequisite: EMT CERTIFICATION, MATH 150 or equivalent. Lab required. 4 credit hours.
EMTP 230 EMERGENCY MEDICAL SERVICES MANAGEMENT
This course will assist students in understanding the complex workings of ambulance operations, including problems related to supervision, morale, communication, insurance, equipment purchasing and maintenance, scheduling and training. Prerequisite: EMT CERTIFICATION. 3 credit hours.

EMTP 231 PARAMEDIC PROCEDURES I
One of a series of courses (EMTP 211, 221 and 231) designed to prepare the successful student to take the state examination for EMT-Advanced (Paramedic) certification. Department of Transportation (DOT) Modules VI, VIII, IX, XI, XII, XIII, XIV and XV are covered including: the cardiovascular system; soft tissue injuries; musculoskeletal injuries; medical emergencies; obstetric/gynecological emergencies; pediatrics and neonatal transport; management of the emotionally disturbed; rescue techniques; telemetry and communications. Prerequisite: EMT CERTIFICATION. Lab and clinical required. 7 credit hours.

EMTP 296 SEMINAR: PARAMEDIC REFRESHER
Designed to keep students informed on a variety of issues affecting emergency medical care. Weekly topics will range widely, covering topics from equipment and techniques to moral and legal issues. May be repeated for credit. 1 credit hour.

ENGLISH

ENGL 040 DEVELOPMENTAL WRITING I
A skills improvement course designed to help the student improve basic writing skills necessary for Composition/Rhetoric I. Focus is on paragraph and short essay writing. Basic grammar, punctuation and sentence construction studied as needed. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

ENGL 041 DEVELOPMENTAL WRITING II
A skills improvement course designed to help students reach competencies necessary for ENGL 151. Focus is on advanced paragraph development and medium length essay writing. Critical reading skills, analytical writing and vocabulary building is emphasized. Punctuation and sentence construction studied as needed. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

ENGL 050 DEVELOPMENTAL GRAMMAR I
A skills improvement course designed to help the student strengthen the sentence for clarity, emphasis, more concise expression of thought. Focus is on all facets of standard written English—correct grammar, punctuation and usage. This course will teach the student to recognize and correct common errors in sentence structure and may be taken concurrently with any English course. This course may not be used to satisfy the requirements of an associate degree. Lab required. 3 credit hours.

ENGL 151 COMPOSITION/RHETORIC I
A beginning freshman course in writing. Development of paragraphs and the whole composition, study of model essays, extensive theme writing, individual conferences and departmental final exam. Assessment prior to enrollment required. Lab required. 3 credit hours.

ENGL 152 COMPOSITION/RHETORIC II
Continued development of skills acquired in English 151 and development of skills in argumentation. Analysis and interpretation of various types of argumentation and identification of fallacies. Extensive reading, outlining and summarizing of essays. Extensive writing, study of research methods and materials, preparation of research paper and individual conferences. Prerequisite: ENGL 151. Lab required. 3 credit hours.

ENGL 241 CREATIVE WRITING
Practical experience in the techniques of imaginative writing. May include fiction, non-fiction, poetry or drama. 3 credit hours.

ENGL 251 FORMS OF LITERATURE I
A study of short stories, novels and non-fiction. Analysis and evaluation of major writers in these genres, their techniques and their contributions to our literary heritage. Prerequisite: ENGL 152. 3 credit hours.

ENGL 252 FORMS OF LITERATURE II
A study of mythology, drama and poetry. Analysis and evaluation of our classical heritage, the origins of drama and development of contemporary drama and film, the elements and types of poetry. Prerequisite: ENGL 152. 3 credit hours.

ENGL 253 BRITISH LITERATURE I
A general survey of major works in British literature from its origin to the beginning of the Romantic movement. Analysis of these works in their historical, cultural and social contexts. Prerequisite: ENGL 152. 3 credit hours.

ENGL 254 BRITISH LITERATURE II
A general survey of major works in British literature from the Romantic period to the present. Analysis of these works in their historical, cultural and social contexts. Prerequisite: ENGL 152. 3 credit hours.

ENGL 255 AMERICAN LITERATURE I
The study of major writers from the Colonial period to the beginning of the Civil War. The analysis and evaluation of these works in their historical, cultural and social contexts and the study of their contributions to the growth of American literature. Prerequisite: ENGL 152. 3 credit hours.

ENGL 256 AMERICAN LITERATURE II
The study of major writers from the Realistic movement to the present. Evaluation and analysis of these works in their historical, cultural and social contexts and the study of their contributions to the growth and development of American literature. Prerequisite: ENGL 152. 3 credit hours.

ENGL 257 WORLD LITERATURE I
Introduces the student to a multiplicity of literary histories beginning with the classical Creek period through the 16th century. The students will read representative selections, analyze and discuss philosophies, societal mores, social milieu and social concerns. Prerequisite: ENGL 152. 3 credit hours.

ENGL 258 WORLD LITERATURE II
Introduces the student to a multiplicity of literary histories beginning with the 17th century through the 20th century. The students will read representative selections, analyze and discuss philosophies, societal mores, social milieu and social concerns. Prerequisite: ENGL 152. 3 credit hours.

ENGL 291 TECHNICAL WRITING
A comprehensive introduction to technical writing and technical communication. Review of mechanical techniques employed in correct technical writing. Preparation of reports, proposals, technical papers, abstracts and summaries within the specific areas of technical interest of the student. Preparation of a portfolio of the student's technical writing. Prerequisite: ENGL 152. Lab required. Note: Students in certain technical programs may be admitted to this course with a prerequisite of ENGL 151 and consent of the coordinator of English. 3 credit hours.

ENGINEERING

ENGR 151 ENGINEERING GRAPHICS
Use of instruments, applied geometry, engineering lettering, orthographic projections, dimensioning, pictorial drawing and sketching, sectional views and working drawings. Lab required. 3 credit hours.

ENGR 191 ENGINEERING MECHANICS I
Vectors, tensors, foundations of Mechanics. Motion of particles including momenta, energy, work concepts. Statics including concept of free-body diagrams. Friction forces, virtual work. Prerequisite: MATH 192. 3 credit hours.

ENGR 192 ENGINEERING MECHANICS II
Dynamics of particles including harmonic motion, motion of a particle in a central force field. Momentum and energy methods. Relative motion in rigid bodies. Prerequisite: ENGR 191. 3 credit hours.
ENGR 291 MATERIALS AND PROCESSES
Simple structural elements are studied. Emphasis on forces, deformation and material properties. The concepts of stress, strain and elastic properties are presented. Analysis of thin-walled vessels, members loaded in tension, torsion, ending and shear, combined loadings, and stability conditions are included. Behavior phenomena such as fracture, fatigue and creep are introduced. Prerequisite: ENGR 191. 3 credit hours.

ENGR 292 ELECTRICAL CIRCUIT ANALYSIS
Electrical science introduced. Includes fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also examined. Prerequisite: MATH 293 or concurrent enrollment in MATH 293, EET 150 or instructors consent. Lab required. 4 credit hours.

ENGLISH AS A SECOND LANGUAGE

ESLC 061 ESL LISTENING-CONVERSATION
This course is designed to develop the native speaker’s competencies in English. The purpose of the course is to prepare students to function in an English speaking society. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 36-42 on the assessment. Lab required. 3 credit hours.

ESLC 062 ESL LISTENING-CONVERSATION
This course is a continuation of ESLC 061 and is designed to develop the non-native speaker’s competencies in English. Its purpose is to prepare students to function in an English speaking society. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 43-52 on the assessment. Lab required. 3 credit hours.

ESLC 063 ESL LISTENING-CONVERSATION
This course is a continuation of ESLC 062 and is designed to develop the non-native speaker’s competencies in English. Its purpose is to prepare students to function in an English speaking society. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 53-65 on the assessment. Lab required. 3 credit hours.

ESLR 061 ESL READING
This course is designed to develop fundamental reading skills for non-native speakers. The purpose of the course is to prepare students to read and comprehend the English language. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 36-42 on the assessment. Lab required. 3 credit hours.

ESLR 062 ESL READING
This course is a continuation of ESLR 061 and is designed to develop the non-native speaker’s reading competencies in English. Its purpose is to prepare students to function in an English speaking society. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 43-52 on the assessment. Lab required. 3 credit hours.

ESLR 063 ESL READING
This course is a continuation of ESLR 062 and is designed to develop reading competencies for the non-native speaker. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 53-65 on the assessment. Lab required. 3 credit hours.

ESLW 061 ESL WRITING
This course is designed to develop the non-native speaker’s competencies in writing in the English language. The purpose of this course is to prepare students to communicate through written words. Spelling, punctuation, usage and sentence construction will be stressed. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 36-42 on the assessment. Lab required. 3 credit hours.

ESLW 062 ESL WRITING
This course is a continuation of ESLW 061 and is designed to develop competencies in writing in the English language. Its purpose is to prepare students to communicate through written words. Spelling, punctuation, usage and sentence construction will be stressed. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 43-52 on the assessment. Lab required. 3 credit hours.

ESLW 063 ESL WRITING
This course is a continuation of ESLW 062 and is designed to develop competencies in writing in the English language. Its purpose is to prepare students to communicate through written words. Spelling, punctuation, usage and sentence construction will be stressed. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: Score of 53-65 on the assessment. Lab required. 3 credit hours.

FIRE SCIENCE

FISC 106 FUNDAMENTALS OF FIRE PROTECTION
History and philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organization; a discussion of current related problems and review of expanding future fire protection problems. 3 credit hours.

FISC 121 INDUSTRIAL FIRE PROTECTION
Specific concerns and safeguards related to business and industrial organizations. A study of industrial fire brigade organization and development, plant layout, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organizations. Study of elementary industrial fire hazards in manufacturing plants. 3 credit hours.

FISC 125 CHEMISTRY OF HAZARDOUS MATERIALS
Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e., flammable liquids, combustible solids and gases. Emphasis on emergency situations and the most favorable methods of handling fire fighting and control. 3 credit hours.

FISC 131 BUILDING CODES AND CONSTRUCTION
Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures and related data focused on fire protection concerns; review of related statutory and suggested guidelines, both local and national scope. Review of Model Building Codes and Life Safety Codes. 3 credit hours.

FISC 133 FIRE CAUSE AND ORIGIN DETERMINATION
A study of the detection of arson. Investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussion of laws, decision and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between fire fighters and arson investigators and other related topics. 3 credit hours.
FISC 135 Firefighter Certification I
First in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. An introduction to fire department organization, fire apparatus, fire science, firefighter safety, fire alarm and communications, report writing and emergency driving. Prerequisite: Admission to the program. Lab required. 3 credit hours.

FISC 136 Firefighter Certification II
Second in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of fire service hydraulics, water supplies, fire stream practices and fire hose. Prerequisite: FISC 135. Lab required. 2 credit hours.

FISC 137 Firefighter Certification III
Third in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of force entry techniques, rope practices, fire extinguisher applications, ventilation practices, ladder practices, self-containment breathing apparatus and the role of the fire service during civil disorders. Prerequisite: FISC 136. Lab required. 3 credit hours.

FISC 138 Firefighter Certification IV
Fourth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of rescue practices, aircraft fire protection and rescue procedures, structure fire salvage and overhaul techniques, and the operations of automatic sprinklers. Prerequisite: FISC 137. Lab required. 2 credit hours.

FISC 139 Firefighter Certification V
Fifth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. A study of inspection practices, hazardous materials, fire and arson investigation, pre-fire planning, bomb search investigations, emergency management operations and community relations. Prerequisite: FISC 138. Lab required. 3 credit hours.

FISC 140 Firefighter Certification VI
Sixth in a series of courses preparing the student for certification as a Basic Firefighter by the Texas Commission on Fire Protection Personnel Standards and Education. An in-depth study of simulated emergency operations and hands-on live fire training exercises applying basic fire suppression principles and techniques. Prerequisite: FISC 139 or approval from fire science discipline coordinator. Lab required. 1 credit hour.

FISC 141 Fire Administration I
In-depth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department offices. Personnel administration and distribution of equipment and personnel and other related topics, including relations of various government agencies to fire protection areas. Fire service leadership as viewed from the company officer’s position. 3 credit hours.

FISC 148 Firefighting Tactics and Strategy
Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis on planning, study of conflagration problems, fire ground organization problem solving related to fire ground decision making and attack tactics and strategy. Use of mutual aid and large scale command problems. Lab required. 4 credit hours.

FISC 225 Chemistry of Hazardous Materials II
Hazardous materials covering storage, handling, laws, standards and fire fighting techniques associated with chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuels, and radioactive materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radioactive materials and operational procedures. Prerequisite: FISC 125. 3 credit hours.

FISC 226 Hazardous Materials III
An in-depth study of the tactics used to contain hazardous materials incidents including: diking, drum/cylinder plugging and/or repair, evacuation procedures, use of monitoring equipment. Review of legislative mandates applicable to hazardous material incident responders. Students will have extensive “hands-on” experience throughout the course of instruction. 3 credit hours.

FISC 229 Methods for Fire Service Instruction
Principles of learning and teaching including instructor responsibilities, lesson plan design and development, motivation for learning, methods of teaching, effective use of instructional aids, safety considerations, evaluation techniques, record keeping and practice teaching. 3 credit hours.

FISC 230 Fire Service Computer Applications
Designed to familiarize the student with various software packages for fire service management applications. Provides in-depth training in the use of Texas Fire Incident Reporting System (TFIRS) software and the associated data analysis programs. Students will have extensive “hands-on” experience throughout the course of instruction. Lab required. 3 credit hours.

FISC 237 Fire Incident Reporting Systems
In-depth study of computerized systems that may be utilized for storing and retrieval of fire loss statistics, also techniques and procedures for programing various types of records and reports valuable to the fire service. Exploration of the new systems of microfilming including the modern technology of COM (Computer Output Microfilm) and the systems utilizing microfiche, including reduction of ratios and various type readers. A review of standards for the uniform coding for fire protection as developed by the NFPA in Pamphlet 901 and 901 AM. Lab required. 3 credit hours.

FISC 240 Introduction to CAMEO (Computer-Aided Management of Emergency Operations)
An indepth study of the CAMEO computer program and its usage for hazardous material incident response. Data manipulation within the CAMEO system forpre-incident planning. Chemical listing, mapping and risk assessments are explored. Students will have extensive “hands-on” experience throughout the course of instruction. Prerequisite: FISC 125. Lab required. 3 credit hours.

FISC 241 Fire Administration II
Study to include insurance rates and ratings; preparation of budgets, administration and organization of training in the fire department, city water requirements, fire alarm and communication systems; importance of public relations, report writing and record keeping; measurements of results, use of records to improve procedures and other related topics; legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings. 3 credit hours.

FISC 296 Seminar
Designed to keep students informed on a variety of fire ground techniques developed to address problems encountered during fire suppression operations. May be repeated for credit. 1 credit hour.

FREN 191 Beginning French I
An introduction to the four basic skills of speaking, reading, writing and listening, designed for students with little or no previous language training. Also includes an introduction to selected aspects of French civilization. Instruction is enhanced by the use of tapes, slides, computer software and video cassettes. Lab required. 4 credit hours.

FREN 192 Beginning French II
A continuation of French 191. Prerequisite: French 191. Lab required. 4 credit hours.

FREN 291 Intermediate French I
Review and continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by slides, tapes and other audio-visual aids. Prerequisite: FREN 192 or consent of discipline coordinator. Co-requisite: FREN 293. 3 credit hours.
FREN 292 INTERMEDIATE FRENCH II
A continuation of French 291. Prerequisite: FREN 291. Co-requisite: FREN 294-3 credit hours.

FREN 293 FRENCH CONVERSATION II
Intensive practice in conversational French. Prerequisite: FREN 192 or consent of discipline coordinator. Co-requisite: FREN 291. 1 credit hour.

FREN 294 FRENCH CONVERSATION III
A continuation of French 293. Prerequisite: FREN 293. Co-requisite: FREN 292. 1 credit hours.

FREN 295 FRENCH LITERATURE I
A survey of French literature in its historical context from the sixteenth through the nineteenth centuries. Continued practice in the basic language skills. Reading of selected writers such as Ronsard, Moliere, Voltaire. Prerequisite: FREN 292. 3 credit hours.

FREN 296 FRENCH LITERATURE II
A continuation of French 295. A survey of French literature in the twentieth and twenty-first centuries with reading from representative writers such as Hugo, Baudelaire and Camus. Prerequisite: FREN 292. 3 credit hours.

GEOGRAPHY

GEOG 151 PHYSICAL GEOGRAPHY
Introduction to the study of the physical environment. Emphasis on climates, landforms, vegetation and spatial relationships of selected geographical regions of the world. Lab required. 3 credit hours.

GEOG 152 CULTURAL GEOGRAPHY
Introduction to the study of the cultural and economic environment. Emphasis on origins, diffusion, and distribution of races, religions and languages. Lab required. 3 credit hours.

GEOL 191 PHYSICAL GEOLOGY
Structure of the earth and its composition including topographic maps, rocks, and minerals, and geologic processes. These processes are related to weathering, gradation by wind and running water, ground water, glaciers, oceans and volcanism. Lab required. 4 credit hours.

GEOL 192 HISTORICAL GEOLOGY
The earth and its inhabitants as revealed in rocks and fossils. Brief survey of the plant and animal kingdoms, elementary principles of stratigraphy and a systematic study of the development of the earth from its origin as a planet to the present. Lab required. Prerequisite: GEOL 191 or consent of instructor. 4 credit hours.

GEOL 193 ROCKS AND MINERALS IDENTIFICATION
The chemistry, classification, crystallography, identification and occurrence of minerals. The formation, classification and identification of igneous, sedimentary and metamorphic rocks will also be covered. This course is intended primarily for geology majors. Prerequisite: GEOL 191. Lab required. 4 credit hours.

GEOL 700 GEOLOGY INTERNSHIP
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

GERMAN

GERM 191 BEGINNING GERMAN I
Introduction to the four basic skills of speaking, reading, writing, and listening, designed for students with little or no previous language training. Also includes attention to German civilization. Instruction enhanced by the use of tapes, slides, computer software and video cassettes. Lab required. 4 credit hours.

GERM 192 BEGINNING GERMAN II
Continuation of German 191 with an emphasis on the reading of elementary texts. Prerequisite: GERM 191 or equivalent. Lab required. 4 credit hours.

GERM 291 INTERMEDIATE GERMAN I
Review and continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by the use of tapes, slides and other audio-visual aids. Prerequisite: GERM 192 or consent of discipline coordinator. 3 credit hours.

GERM 292 INTERMEDIATE GERMAN II
Continuation of German 291. Prerequisite: GERM 291.3 credit hours.

GERM 293 CONVERSATIONAL GERMAN I
Intensive practice in conversational German. Prerequisite: GERM 192 or consent of discipline coordinator. 1 credit hour.

GERM 294 CONVERSATIONAL GERMAN II
Continuation of German 293, intensive practice in conversational German. Prerequisite: GERM 293. 1 credit hour.

HUMAN DEVELOPMENT

HDEV 010 STUDY SKILLS
Designed to help the student improve study habits and skills. Student assesses learning style, study habits and attitudes toward study. Explores methods and techniques of effective study. Specific approach to studying will be developed by each student utilizing individual preferences. Opportunity provided to practice study skills enhancing the rate of learning. This course may not be used to satisfy the requirements of an associate degree. 2 credit hours.

HDEV 020 STRESS MANAGEMENT
Designed to help the student manage stress more effectively. Comprehensive self-assessment of the sources of stress will be made. Student explores low stress lifestyle, low stress thinking patterns, systematic relaxation techniques, the role of diet and exercise in managing stress and how to avoid unnecessary stress. This course may not be used to satisfy the requirements of an associate degree. 2 credit hours.

HDEV 102 DEVELOPING LEADERSHIP POTENTIAL
Develops leadership skills. Topics include: leadership style, leadership strategies, problem-solving, decision-making, communication, value systems and methods of working with groups. Concepts of leadership are explored through both theory and practice. These leadership skills can be applied through the student’s personal, professional and business interactions. 3 credit hours.

HDEV 103 CAREER PLANNING AND DEVELOPMENT
Career choices will be explored in relation to interests, values, skills and abilities. Career assessment and exploration of occupational opportunities will be studied through group and independent study activities. Long and short range career development strategies will be established. Computerized career guidance will be explored on campus. 2 credit hours.

HDEV 105 PERSONAL DEVELOPMENT
Designed to help the student increase self-esteem, set personal goals that lead to greater motivation and success, and to develop a satisfying lifestyle. Components of a healthy lifestyle will be presented. Problems concerning college survival, educational goals, motivation, interpersonal relationships, societal influences and personal roles will be explored. 2 credit hours.

HISTORY

HIST 151 U.S. HISTORY I
History of the United States is presented focusing on the development of American characteristics and institutions; the forging of a new society from European, African and American cultures. Emphasis on the colonial and early national periods through the Civil War and Reconstruction. HIST 151 and HIST 152 fulfill the Texas legislative requirement for 6 credit hours of history for baccalaureate degrees. Lab required. 3 credit hours.
HIST 152 U.S. History II
History of the United States from 1877 to the present day. Focus is on the development of American society in the twentieth century, response to the urban-industrial environment, the United States as a world power and post-World War II society. This course and HIST 151 fulfill the Texas legislative requirement for 6 hours of history for baccalaureate degrees. Lab required. 3 credit hours.

HIST 251 Western Civilization I
A survey of European civilization from ancient times to the Renaissance. Topics include Greece and Rome, the Church, feudalism, the commercial revolution, the Reformation and early colonial movement. Lab required. 3 credit hours.

HIST 252 Western Civilization II
Continuation of History 251. Western Europe is surveyed from the Renaissance to the present. Topics include the Age of Revolution, the beginning of industrialism, the growth of nationalism and democracy in the 19th century, causes and consequences of the two world wars and modern Europe. Lab required. 3 credit hours.

HIST 253 History of Texas
History of Texas from the Spanish period to the present. Emphasis on the period of Anglo-American settlement, revolution, Republic and the development of the modern state. 3 credit hours.

HIST 297 Studies in U.S. History
A treatment of selected topics in the history of the United States. This course may be repeated for credit only when the course focuses on new topics. Prerequisite: HIST 151. 1 credit hour.

HIST 298 Advanced Studies in U.S. History
In-depth study of selected topics in minority, local, regional, national or international topics. This course may be repeated for credit only when the course focuses on new topics. Prerequisite: HIST 151, 152. Lab required. 3 credit hours.

HIST 700 History Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

HEALTH SCIENCE

HLSC 132 Medical Terminology
Study of the basic structure of medical words. Included are prefixes, suffixes, roots combining forms and plurals. Emphasis on pronunciation, spelling and definition. Basic understanding of human anatomy and physiology and the terms relating to these and their medical applications are emphasized. 3 credit hours.

HLSC 191 General Nutrition
Study of nutrients and nutritional processes including functions, food sources, digestion absorption and metabolism with application to normal and therapeutic human nutritional needs. 3 credit hours.

HORTICULTURE/LANDSCAPE TECHNOLOGY

HLT 115 Native Plants of Texas
A non-major course devoted to the study of those plants which are considered native to the state of Texas. Includes identification and landscape use of native plants, and the concept of xeriscape. Lab required. 3 credit hours.

HLT 116 Plants of North Texas
A non-major course devoted to the study of those plants used in the north Texas area, including trees shrubs, groundcovers, vines and flowers. Includes identification, use and maintenance of plants. Lab required. 3 credit hours.

HLT 117 Interior Plants
Students are introduced to plants which are utilized in interior landscapes and the special maintenance required. Particular attention is given to light and water requirements, temperature control, planting media and design of interior plantings. Prerequisite: HLT 190 or consent of instructor. Lab required. 3 credit hours.

HLT 125 Soils and Plant Nutrition
The study of different soil types and how they affect the availability of nutrients. Emphasis on making and keeping the soil healthy, proper drainage, and organic and inorganic properties in a soil. Includes the study of organic and inorganic fertilizers, soil additives, organic matter, proper horticultural practices and the role of micro and macro-organisms in the soil. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 126 Pests and Controls
A comprehensive course in the pests that affect plant growth and production and the methods used to control them. Includes biological, chemical and integrated pest management (IPM) programs. Emphasis on beneficial insects, fungi and bacteria. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 140 Turf-Grass Science and Management
Introduction to turf-grass science and management. Characteristics of turf-grasses, identification and culture are studied. Modern management practices are explained, including installation, renovation and maintenance. Identification and control of diseases and insects that affect turf-grasses will also be studied. Lab required. 3 credit hours.

HLT 190 Basic Horticulture
Introduction to the culture of plants, including their distribution, factors which affect growth, plant structures, propagation and the impact of plants on the environment and the economy. Lab required. 3 credit hours.

HLT 191 Woody Plant Materials
The study of the woody plants collected or grown for use in the landscape industry, with an emphasis on the North Texas area. Includes trees, shrubs, woody vines and ground covers. Prerequisite: HLT 190. Lab required. 4 credit hours.

HLT 192 Herbaceous Plant Materials
The study of non-woody ground covers and vines, and annual and perennial flowers cultivated or collected for use in the landscape industry. Prerequisite: HLT 190. Lab required. 4 credit hours.

HLT 210 Introduction to Landscape Design
An introductory course covering the history, basic drawing skills, graphic communication, site planning and the elements of landscape design. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 211 Home Landscape Design
Intensive course in landscape design. Emphasis on proper plant selection. Introduction to the development of the design beyond the conceptual stage, and general construction details. Prerequisite: HLT 210. Lab required. 4 credit hours.

HLT 220 Irrigation Systems
A comprehensive study of irrigation systems including equipment, design and performance. Includes residential and commercial applications. Prerequisite: HLT 190, or consent of instructor. Lab required. 3 credit hours.

HLT 225 Landscape Construction
Construction materials and their use in the landscape industry, including soil preparation, wood, concrete and masonry instruction. Landscape lighting, pools and spas, and general construction details. Prerequisite: HLT 190, 191 and 192. Lab required. 4 credit hours.

HLT 230 Site Analysis and Surveying
Analyzing a site to determine existing structures, plants, grades and potential problems. Emphasis on surveying, measurement and the mapping of existing conditions. Includes correct record keeping and area measurement. Prerequisite: HLT 190. Lab required. 4 credit hours.
HLT 235 LANDSCAPE BUSINESS OPERATIONS
Details study of the structure of the landscape business including cost estimating, organization, equipment needs, interpretation of financial reports, marketing, and labor and equipment management. Emphasis on the different types of landscape operations, marketing, sales presentations, legal forms and contracts, construction law and safety. Prerequisite: HLT 190. Lab required. 4 credit hours.

HLT 250 NURSERY AND GREENHOUSE PRODUCTION
The study of the production of nursery crops in the field, containers and greenhouse for use in the landscape industry. Includes equipment, materials, structures, management, financial considerations, and marketing related to nursery production. Emphasis on field and outdoor container crops. Prerequisite: HLT 190, 191, 192. Lab required. 4 credit hours.

HLT 260 LANDSCAPE MAINTENANCE I
An introduction to landscape maintenance practices, including the proper care of trees, shrubs and turf. Includes organic and inorganic fertilization and pest control. Prerequisite: HLT 190, 191, 192. Lab required. 4 credit hours.

HLT 261 LANDSCAPE MAINTENANCE II
A continuation of landscape maintenance, with emphasis on specialized maintenance programs with special problems. Small engine troubleshooting and repair included. Prerequisite: HLT 125 and HLT 260. Lab required. 3 credit hours.

HLT 285 PLANT PROPAGATION
The principles and practices of sexual and asexual plant propagation, including grafting, budding, layering, cuttings, and seed germination. Soil mixes, plant structures and the equipment and facilities for proper plant propagation discussed. Introduction to tissue culture. Prerequisite: HLT 190, 191, 192. Lab required. 4 credit hours.

HLT 270 ARBORICULTURE
Proper care of trees, including pruning, spraying, fertilizing, protection during construction and removal of dead or diseased trees. Continued study of pests which attack trees, and the tools and equipment utilized by arborists included. Prerequisite: HLT 190, 192. Lab required. 3 credit hours.

HLT 275 FLORICULTURE
Production of greenhouse crops, including flowering plants, herbs and interior plants. Emphasis on historical development, growing requirements and the marketing of greenhouse produced plants. Prerequisite: HLT 250. Lab required. 3 credit hours.

HLT 280 VITICULTURE
Growing of grapes for commercial use, including the wine industry. Special attention given to varietal selection, proper watering, fertilizing, pruning and soil requirements for grape growing. Prerequisite: HLT 190. Lab required. 3 credit hours.

HLT 290 FIELD EXPERIENCE I
On-the-job experience in a work assignment related to student's field of study. Credit is earned for completion of specific learning objectives and participation in an arranged weekly seminar. Students must work 20 hours per week and be concurrently enrolled in another horticulture course at CCC. Prerequisite: HLT 190, 191, 192 and/or consent of coordinator. 3 credit hours.

HLT 291 FIELD EXPERIENCE II
Continuation of supervised on-the-job training related to student's field of study. New learning objectives are established with continued participation in seminar. 20 hours per week employment and concurrent enrollment in another horticulture course at CCC. Prerequisite: HLT 290. Lab required. 3 credit hours.

HLT 293 SUMMER INTERNSHIP
Intensive on-the-job training during a continuous three month period, required of all landscape technology majors. Students will have hands-on experiences in the landscape field and will be required to keep a journal of their experiences. Prerequisite: Consent of discipline coordinator. 4 credit hours.

HLT 296 HORTICULTURE AND LANDSCAPE TECHNOLOGY SEMINAR
A topic will be presented and a discussion led by each student during the semester. Topics based on the nursery and landscape industry. Credit based on presentation, class participation and a written paper. May be repeated for credit. Prerequisite: HLT 190 and consent of enrollment in another horticulture course at CCC. 1 credit hour.

HEALTH, PHYSICAL EDUCATION AND DANCE

HPED 101 INTRODUCTION TO PHYSICAL EDUCATION
Designed as a career orientation in health, physical education and recreation. The history, philosophy and principles including teacher qualifications, vocational opportunities and skills testing are emphasized. 3 credit hours.

HPED 103 PERSONAL HEALTH
Provides an in-depth look at the basic principles of maintaining good health throughout life. The topics cover aspects of personal health such as mental, consumer and environmental health; physical fitness, nutrition and drug education. 3 credit hours.

HPED 104 SPORTS OFFICIATING
Knowledge and practice in officiating volleyball, basketball and other appropriate sports are stressed. Students are expected to officiate tournaments and intramural games. Lab required. 3 credit hours.

HPED 106 SAFETY AND FIRST AID
Students learn to recognize, evaluate and prioritize the first aid needs of individuals in emergency situations. Lectures, demonstrations and practical experience provide qualified students with American Red Cross certification. 3 credit hours.

HPED 115 ARCHERY
Provides instruction in the basic techniques, rules and scoring. The history and terminology of archery are also investigated. 1 credit hour.

HPED 116 BADMINTON
History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class competition. 1 credit hour.

HPED 117 BEGINNING TENNIS
Introduction to the rules, scoring and fundamental techniques for beginners are stressed. Participation by skill level for singles and doubles play is made to ensure vigorous activity for fitness. 1 credit hour.

HPED 118 INTERMEDIATE TENNIS
Develops and improves each skill level in serving, forehand and backhand drives, lobs and volleys. Performance strategies for both singles and doubles are drilled. Prerequisite: HPED 117 or consent of instructor. 1 credit hour.

HPED 119 ADVANCED TENNIS
Emphasizes advanced techniques and strategies for the competitive tennis player. Provides theory and practice drills for advanced players who ultimately compete in singles and doubles tournaments. Prerequisite: HPED 118 or consent of instructor. 1 credit hour.

HPED 120 BEGINNING RACQUETBALL
Instruction in rules and basic skills. Develops the fundamental techniques of court play for beginners. Participation by skill level assures vigorous activity to develop cardiovascular fitness. 1 credit hour.

HPED 121 INTERMEDIATE RACQUETBALL
Drills in serving, forehand and backhand drives, kill shots, 2 shots and lobs help develop strategies for singles and doubles play. Prerequisite: HPED 120 or consent of instructor. 1 credit hour.

HPED 122 ADVANCED RACQUETBALL
Advanced drills for competitive racquetball players stress techniques and strategies needed for tournament competition. Prerequisite: HPED 121 or consent of instructor. 1 credit hour.
**HPED 123 Beginning Golf**
Basic fundamentals, knowledge of the history, terminology and scoring of golf are stressed. 1 credit hour.

**HPED 124 Intermediate Golf**
Advanced skill techniques and strategies of golf are developed. Prerequisite: HPED 123 or consent of instructor. 1 credit hour.

**HPED 126 Bowling**
Ball selection, stance, four step approach, rules and scoring procedures are taught. Emphasis is placed on game situations. 1 credit hour.

**HPED 130 Beginning Aerobic Dance**
Level of physical fitness is improved through rhythmic dance routines, stretching, muscular strengthening and other aerobic activities. Heart rate, weight and nutritional status are monitored. Prerequisite: HPED 131 or consent of instructor. 1 credit hour.

**HPED 131 Intermediate Aerobic Dance**
Further toning and trimming of the body is obtained through vigorous exercise routines, stretching, muscular strengthening and other aerobic activities. Heart rate, weight and nutritional status are monitored. Prerequisite: HPED 130 or consent of instructor. 1 credit hour.

**HPED 132 Advanced Aerobic Dance**
An accelerated aerobic conditioning program for advanced fitness students. Advanced exercise routines with weights are choreographed to music to maintain or increase cardiovascular endurance, flexibility and strength. Prerequisite: HPED 131 or consent of instructor. 1 credit hour.

**HPED 133 Beginning Modern Dance**
An introduction to the an and discipline of modern dance through analysis of dance techniques, exploration and composition development. 1 credit hour.

**HPED 135 Beginning Dance**
A practice in basic jazz movements including isolations, elementary jumps and turns. Participation in choreographed combinations using different rhythmic structures is also included. 1 credit hour.

**HPED 136 Intermediate Jazz Dance**
Further practice in jazz movements including intermediate isolations, jumps and turns. Participation in choreographed combinations using moderately complex rhythmic structures. 1 credit hour.

**HPED 137 Beginning Ballet**
Student develops elementary ballet technique and knowledge of terminology through participation in barre, center work and beginning movement combinations; emphasis on alignment. 1 credit hour.

**HPED 138 Intermediate Ballet**
Further practice in ballet technique through participation in barre, center work and basic enchainments. Prerequisite: HPED 137 or consent of instructor. 1 credit hour.

**HPED 139 Folk Dance**
Analysis of cultural backgrounds, costumes and dance techniques leads to participation in a variety of folk dances. 1 credit hour.

**HPED 140 Beginning Weight Training and Conditioning**
An introductory course in weight training and building to learn the basic techniques for strength development and cardiovascular conditioning. The use of the universal weight machine, free weights, dumbbells, bicycle ergometers, rowing machines and a treadmill are utilized to establish an individual fitness program. 1 credit hour.

**HPED 141 Intermediate Weight Training and Conditioning**
Advanced techniques in strength development and cardiovascular conditioning assists individuals in establishing their own fitness program. Prerequisite: HPED 140 or instructor’s permission. 1 credit hour.

**HPED 142 Advanced Weight Training and Conditioning**
Weight training program tailored to the individual who has experience in proper techniques and conditioning and wants to continue in an excelled program. Prerequisite: HPED 141 or consent of instructor. 1 credit hour.

**HPED 143 Beginning Jogging and Fitness**
Develops cardiovascular endurance, flexibility and strength through jogging, stretching and weight training. Physical fitness assessment leads to development of an individual fitness program. 1 credit hour.

**HPED 144 Intermediate Jogging and Fitness**
An accelerated fitness program structured for further improvement in cardiovascular endurance, flexibility and strength. Prerequisite: HPED 143 or instructor’s permission. 1 credit hour.

**HPED 145 Walking and Fitness**
The student will improve cardiovascular, muscular toning and flexibility through a vigorous walking and conditioning program. 1 credit hour.

**HPED 146 Cycling**
An introductory course in cycling to learn the basic techniques of bicycling and improve cardiovascular conditioning. Students are required to have their own bicycle. 1 credit hour.

**HPED 148 Cross Training I**
Extensive course offering training techniques and strategies for multi-sport aerobic activities. Involves a weight training program specifically designed to build strength and a running program that will include intervals, hills and speed work for the cross training athlete. Concurrent enrollment in HPED 148 recommended. 1 credit hour.

**HPED 149 Cross Training II**
Extensive course offering training techniques and strategies for multi-sport aerobic activities. Involves competitive swimming and cycling workouts emphasizing technique and improvement. Students are required to have their own bicycle. Concurrent enrollment in HPED 148 recommended. 1 credit hour.

**HPED 150 Basketball**
Fundamental skills and strategies are reviewed through knowledge of the history, rules, terminology. Students then participate in game situations. 1 credit hour.

**HPED 152 Soccer**
Develops the basic skills and strategies through knowledge of the history, rules and terminology are taught along with participation in game situations. 1 credit hour.

**HPED 154 Softball**
Fundamental skills including throwing, batting, fielding and base running as well as knowledge of the rules and terminology are emphasized along with participation in game situations. 1 credit hour.

**HPED 156 Volleyball**
Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed in this course. 1 credit hour.

**HPED 160 Beginning Swimming**
Non-swimmers and beginners are taught basic swimming skills and strokes. Personal safety skills and confidence in the water are emphasized. 1 credit hour.

**HPED 161 Intermediate Swimming**
Includes further stroke development in front and back crawl, side stroke, breast stroke, diving and some competitive swimming techniques. Development of cardiovascular endurance is stressed through lab swimming. Prerequisite: HPED 160 or instructor’s permission. 1 credit hour.

**HPED 163 Advanced Life Saving**
Skills, methods and techniques involved in lifesaving and water safety are reviewed. Successful completion leads to American Red Cross Lifesaving certification. Prerequisite: Ability to swim 500 yards continuously using following strokes — back, breast, crawl, sidestroke, or HPED 161. 1 credit hour.

**HPED 164 Water Safety Instruction**
Successful completion of the course allows the student to take the standardized test given by the American Red Cross examiners for certification as a water instructor. Prerequisite: Current American Red Cross Senior Lifesaving Certificate. 1 credit hour.
**HPED 165 Beginning Scuba**
The course is divided into academic training and confined-water training. All equipment is supplied except mask, fins, boots and snorkel. Students completing course requirements are eligible to perform the open water training for Professional Association of Diving Instructors (PADI) certification as a basic scuba diver (not a course requirement). Permission of HPED coordinator required. 1 credit hour.

**HPED 166 Advance Open-Water Scuba**
Advance open-water scuba combines advance scuba techniques and rescue diving. Scuba techniques include natural and compass navigation as well as night and deep water diving. The rescue diving techniques include rescue diver exercises in water emergency management and diving first aid. Prerequisite: Permission of HPED coordinator required. 1 credit hour.

**HPED 170 Self Defense**
A basic understanding and practical application of fundamental self defense techniques through physical conditioning includes balance, focus breath control, block and counter, avoiding attack, striking, thrusting and kicking. 1 credit hour.

**HPED 171 Beginning Karate**
Introduction to basic techniques, formal exercises and sparring techniques for the beginner. 1 credit hour.

**HPED 172 Wrestling**
Introduces basic skills, knowledge of rules, techniques and physical conditioning so that offensive maneuvers, defensive maneuvers and pinning combinations can be drilled. 1 credit hour.

**HPED 173 Intermediate Karate**
Intermediate skills and techniques of karate. 1 credit hour.

**HPED 180 Dance Performance**
Experience in rehearsal, production and performance. Permission of the instructor is required. 1 credit hour.

**HPED 186 Popular Social Dance**
Practice in contemporary social dances including pop/rock and country western forms. 1 credit hour.

**HPED 187 Beginning Tap**
Performance of basic rhythms and techniques fundamental to beginning tap dance. 1 credit hour.

**HPED 700 Health, Physical Education and Dance Internship**
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

**Humanities**

**HUM 151 Introduction to the Humanities**
Designed to achieve a clearer understanding of the nature of man and his need to create. Explores the relationship between one's own values, feelings, attitudes and ideas and man's cultural achievements. Lab required. 3 credit hours.

**Japanese**

**JAPN 191 Beginning Japanese I**
An introduction to the basic skills of speaking, reading, writing and listening with attention to selected aspects of Japanese culture. Lab required. 4 credit hours.

**JAPN 192 Beginning Japanese II**
A continuation of JAPN 191. Prerequisite: JAPN 191. Lab required. 4 Credit hours.

**Journalism**

**JOUR 151 Introduction to Mass Communication**
A study of the mass media in the United States with emphasis on newspapers, magazines, radio and television. History of the mass media and the role and responsibility of the mass media in modern society. 3 credit hours.

**JOUR 152 News Gathering and Writing I**
Extensive practice in writing various stories in the areas of international, national and local news, sports, business lifestyles, etc. Prerequisite: ENGL 152 or consent of lab. Lab required. 3 credit hours.

**JOUR 153 News Gathering and Writing II**
Continuation of JOUR 152 with emphasis on more advanced reporting techniques such as complex stories, follow-up stories, features and profiles. Prerequisite: JOUR 152. Lab required. 3 credit hours.

**JOUR 251 Survey of Broadcasting**
Study of the historical, theoretical and technical development of broadcast journalism. Emphasis on social, political, economic and ethical aspects of the broadcast industry. 3 credit hours.

**Legal**

**LEGL 130 Law and Judicial Systems**
An introduction to the history of American law. Law of evidence, civil and criminal procedure and to various areas of both civil and criminal substantive law. Study of various personnel in the legal field, the unauthorized practice of law and legal ethics. 3 credit hours.

**LEGL 132 Legal Research**
Fundamentals of legal bibliography and legal research. Practical research problems utilizing legal books and sets of books. Techniques of legal analysis. Samples of various legal writings will be prepared by students. Lab required. 3 credit hour.

**LEGL 135 Law Office Management**
Ethical considerations, office organization, specialized bookkeeping and accounting for attorneys. Fees and billing procedures, scheduling and calendaring, management of personnel, proofreading, management of investigations and file preparation, legal drafting, management and organization procedures for specialized areas of law, special considerations with respect to attorney's trust account, preparation of law office forms, checklists and files and disbursements on behalf of clients. 3 credit hours.

**LEGL 230 Civil Procedure**
Overview of civil litigation in both state and federal courts with particular emphasis on the areas in which a legal assistant can assist the trial attorney. Particular attention is paid to preparation for litigation, discovery proceedings (interrogatories, requests for admissions, depositions and documents), pretrial proceedings and trial.

**LEGL 237 Texas Legal Systems**
Review of the court system of Texas, review of the American Judicial System touching on its historical background. Introduction to the Federal Court Systems and legal practices and how they relate to courts and court administration. 3 credit hours.

**LEGL 238 Law of Defendants and Police Relationships**
A study of the Constitutional tensions between the rights of individuals accused by police of criminal violations and the rights of society to police protection from criminal activity of others. A study of civil rights actions against police. 3 credit hours.
**LEGL 242 PERSONAL PROPERTY, SALES AND CREDIT**
Introduction to elements of the law of personal property, contracts, legal research projects, forms related to law of sales and credit transaction, and survey of the Uniform Commercial Code. 3 credit hours.

**LEGL 251 FAMILY LAW**
Marriage, separation, adoption, divorce, custody, legitimacy, support and other related legal topics. Emphasis on Texas law: Texas Family Code, community property and case law. 3 credit hours.

**LEGL 252 WILLS, TRUSTS AND PROBATE**
Fundamental principles of wills and trusts. The organization and jurisdiction of the Texas Probate Court, analysis of the administration of estates in Texas Probate, guardianships and independent administration of decedent's estates, and a review of estate and inheritance taxes. 3 credit hours.

**LEGL 261 BUSINESS ORGANIZATIONS**
The legal structure of business organizations: corporations, joint stock companies, common law contracts, professional associations, proprietorships, limited partnerships and partnerships. 3 credit hours.

**LEGL 262 TORT AND INSURANCE LAW**
Fundamental principles of the law of tort and insurance. Includes a study of the research and investigation techniques necessary for tort and insurance negotiation, settlement and litigation. Some governmental insurance programs will be covered. 3 credit hours.

**LEGL 263 Income Taxation and Legal Accounting**
Federal, state and local income tax of individuals and tax-paying entities such as estates, trusts and corporations. Introduction to accounting as it relates to legal problems. Prerequisite: Consent of instructor. 3 credit hours.

**LEGL 264 BUSINESS LAW ENVIRONMENT**
Role of law in business and society, legal reasoning, sources of law, legal policy and legal institutions, antitrust, securities laws, consumer protection, environmental law, worker health and safety, employment discrimination, etc. 3 credit hours.

**LEGL 700 COOPERATIVE EDUCATION**
Designed to integrate on-campus classroom study with hands-on work experience. The student, the student’s supervisor and the instructor will establish five specific goals for the student to accomplish. Also required one hour per week of lecture. 3 credit hours.

**MARKETING**

**MRKT 122 FASHION MARKETING**
Introduction into the field of fashion through the examination of modern merchandising techniques. Current trends and developments are covered as well as the history of fashion merchandising. 3 credit hours.

**MRKT 126 FASHION DESIGN**
A basic course providing a background of knowledge specific to the fashion designers job and responsibilities. Its history and the relationship of apparel design to human needs from an industrial point of view. Custom design, design for mass, line production, coordination, selection, color and texture are covered. There is no sewing involved in this course. 3 credit hours.

**MRKT 220 FASHION BUYING**
Covers the responsibilities of a buyer. Sources of buying information, selection of fashion merchandise, methods of inventory, elements of profit, pricing, markup and markdown are studied. Economic issues relating to domestic versus offshore apparel goods will be researched. 3 credit hours.

**MRKT 221 MARKET RESEARCH**
Research techniques applied to problems of measuring market and sales potential. Allocation of territories, demand for goods, consumer purchasing power, sales forecasts. Students will learn use of library and other secondary sources, survey research and design of questionnaires, fundamentals of sampling and data analysis. 3 credit hours.

**MRKT 222 PRINCIPLES OF SELLING**
Students learn and practice selling techniques including outside and inside sales, telemarketing, presentations, reaching decision makers, closing sales, after-sale evaluations, and understanding buyers and consumers. 3 credit hours.

**MRKT 223 BUSINESS ETHICS**
Ethical implications of current issues. Ethical and financial problems in operating businesses (locally, nationally, internationally) will be addressed. The course emphasizes social responsibility of business as well as ethical dilemmas of both buyers and sellers. 3 credit hours.

**MRKT 224 PROMOTION TECHNIQUES**
Methods in how to manage promotion budgets, motivate and reward sales personnel, as well as construct and manage complete promotion programs. Emphasizes the interaction and coordination of promotional planning, implementation and evaluation with an organization’s overall marketing strategy. 3 credit hours.

**MRKT 225 FASHION SHOW PRODUCTION**
Production of an actual fashion show. Including lighting, community involvement, marketing, modeling, apparel selection, set design, crew organization, election primary target market. Offered only in spring semesters. 3 credit hours.

**MrKT 700 COOPERATIVE EDUCATION I**
Designed to help the student integrate classroom knowledge with work experience. The student, the student’s supervisor and the instructor will coordinate a set of goals for the student to accomplish. 3 credit hours.

**MRKT 705 COOPERATIVE EDUCATION II**
Designed to help the student integrate classroom knowledge with work experience. The student, the student’s supervisor and the instructor will coordinate a set of goals for the student to accomplish. Prerequisite: MRKT 700. 3 credit hours

**MATHEMATICS**

**MATH 010 DEVELOPMENTAL MATH**
Review of basic arithmetic operations with whole numbers, fractions, decimals, percents and an introduction to algebra which includes signed numbers, expressions and equations. (This course may not be used to satisfy the requirements for an associate degree.) Lab required. 3 credit hours.

**MATH 020 DEVELOPMENTAL ALGEBRA**
Review of signed numbers, expressions, equations, inequalities, polynomials, radicals, exponents, quadratics and graphing. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: MATH 010 or equivalent. Lab required. 3 credit hours.

**MATH 030 INTERMEDIATE ALGEBRA**
Review of operations of polynomials, rational expressions, radicals, rational exponents, absolute value equations, quadratics, solutions of linear systems and inequalities, graphing and an introduction to conic sections and functions. (This course may not be used to satisfy the requirements of an associate degree.) Prerequisite: MATH 020 or one year of standard high school algebra. Lab required. 3 credit hours.

**MATH 070 INTRODUCTORY GEOMETRY**
An introductory course in plane and solid geometry required for students who have not passed the TASP geometry mathematics requirement or who have not passed high school geometry and plan to take college algebra. (This course may not be used to satisfy the requirements for an associate degree.) Prerequisite: MATH 010 or equivalent. Lab required. 1 credit hours.

**MATH 135 PRE-CALCULUS FOR TECHNOLOGY**
A study of functions including trigonometric, exponential and logarithmic, systems of equations, complex numbers, vectors, trigonometric identities, radian measure and plane analytic geometry with applications in various technical fields. Prerequisite: MATH 030 or acceptable score on placement exam. Lab required. 5 credit hours.
MATH 150 **Contemporary Mathematics**
Intended for general liberal arts or non-engineering technical students. Topics include sets, logic, solving equations and inequalities, graphs and functions, counting methods, probability and consumer mathematics. Prerequisite: Two years of high school algebra or equivalent. 3 credit hours. "Note: This course does not satisfy prerequisite for MATH 151 or MATH 181.

MATH 151 **Pre-Calculus for Business and Economics**
Designed for non-math majors which includes a study of equations, inequalities, functions, matrices, linear programming including the simplex method and sequences. Prerequisite: Two years high school algebra or equivalent. Lab required. 3 credit hours.

MATH 152 **Calculus for Business and Economics**
A continuation of MATH 151; a study of probability, finite differential calculus, finite integral calculus, including exponential and logarithmic functions. Prerequisite: MATH 151. Lab required. 3 credit hours.

MATH 153 **Statistics**
Study of data collection and tabulation, measures of central tendency, correlation, linear regression. Statistical distributions, probability and hypothesis testing with applications in various fields. Prerequisite: Two years of high school algebra or equivalent. Lab required. 3 credit hours.

MATH 181 **College Algebra**
Study of relations and functions, including linear, polynomial, exponential and logarithmic, inverse functions, composition of functions, absolute value, variation, theory of equations, complex numbers, systems of equations, matrices, progressions and the binomial theorem. Prerequisite: Two years high school algebra or equivalent. 3 credit hours.

MATH 182 **Trigonometry**
Study of angular measure, functions of angles, identities. solution of triangles, equations, inverse trigonometric functions, complex numbers and polar coordinates. Prerequisite: Two years of high school algebra and one year of high school geometry or MATH 181 or concurrent enrollment in MATH 181. 3 credit hours.

MATH 183 **Analytic Geometry**
Study of lines, distance, conics, transformation of coordinates, polar coordinates, parametric equations and other selected topics. Prerequisite: MATH 182 or 4 years of standard high school math. 3 credit hours.

MATH 187 **Pre-Calculus for Mathematics and Science**
Study of the algebra of functions and analytic geometry. Includes polynomial, rational, exponential, logarithmic and trigonometric functions, complex numbers, vectors. and the study of conics, translation of coordinates, rotation of axes, polar coordinates and parametric equations. The emphasis will be on mathematical reasoning and problem solving in preparation for calculus. Prerequisite: Algebra I, Algebra II and Trigonometry or equivalents. Lab required. 3 credit hours.

MATH 191 **Calculus I**
Study of limits, continuity, the derivative, applications of the derivative, the indefinite and definite integral, and derivatives and integrals of trigonometric, logarithmic and exponential functions. Prerequisite: MATH 183 or equivalent or concurrent enrollment in MATH 183. Lab required. 4 credit hours.

MATH 192 **Calculus II**
Study of calculus of inverse functions, hyperbolic functions, applications of integration, techniques of integration, infinite series, parametric equations and polar functions. Prerequisite: MATH 191. Lab required. 4 credit hours.

MATH 235 **Calculus for Technology**
Study of the derivative, applications of the derivative, the integral, differentiation and integration of transcendental functions and techniques of integration. Prerequisite: MATH 135 or consent of instructor. Lab required. 3 credit hours.

MATH 290 **Discrete Structures**
Study of introductory mathematical logic, mathematical induction, relations, functions, combinatorics, counting techniques, graphs, trees and networks. Prerequisite: MATH 191 AND ability to program in a high level structured language. Lab required. 3 credit hours.

MATH 291 **Calculus III**
Study of vectors in two and three dimensions, vector-valued functions, functions of several variables, multiple integration and the calculus of vector fields. Prerequisite: MATH 192. Lab required. 4 credit hours.

MATH 292 **Linear Algebra**
Study of linear equations, matrices, real vector spaces, linear transformations and eigenvectors. Prerequisite: MATH 192. 3 credit hours.

MATH 293 **Differential Equations**
Study of ordinary differential equations including systems of equations, linear equations, separation of variables, series solutions, uniqueness of solutions, boundary value problems, transform methods and singular points. Prerequisite: MATH 192. 3 credit hours.

MATH 700 **Math Internship**
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student’s supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor, 3 credit hours.

**MUSIC**

MUS 140 **Music Fundamentals**
An introduction to the elements of music theory: scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter and rhythm. 3 credit hours.

MUS 145 **Music of America**
General study of various styles of music in America. Topics to include folk jazz, pop, rock and 20th century American composers. 3 credit hours.

MUS 150 **Choir**
A wide variety of music representing the choral literature is studied and performed. This course may be repeated for credit. 1 credit hour.

MUS 151 **Music Theory I**
The basic elements of music. Emphasis is on notation, cadences, diatonic triads, scales and modes. Co-requisite: MUS 152. Lab required. 3 credit hours.

MUS 152 **Aural Skills I**
Skills include sight-singing, ear-training and keyboard harmony. Co-requisite: MUS 151. 1 credit hour.

MUS 153 **Music Theory II**
Concentrates on part-writing and harmonization with triads and their inversions. Prerequisite: MUS 151. Co-requisite: MUS 154. Lab required. 3 credit hours.

MUS 154 **Aural Skills II**
Skills of sight-singing, ear-training and keyboard harmony are further developed. Prerequisite: MUS 152. Co-requisite: MUS 153. 1 credit hour.

MUS 155 **Cuss Voice**
Class instruction in the fundamentals of singing including breath support, correct vocal production and diction. For the non-music major. This course may be repeated for credit. 1 credit hour.

MUS 156 **Cuss Voice II**
Continuation of Class Voice I. Prerequisite: MUS 155. 1 credit hour.

MUS 157 **Cuss Guitar**
Class instruction in the fundamentals of beginning guitar. For the non-music major. This course may be repeated for credit. 1 credit hour.

MUS 158 **Cuss Guitar II**
Continuation of Class Guitar I employing advanced reading skills, chord structures and techniques. Prerequisite: MUS 157. 1 credit hour.
**MUS 160 Band**
The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit. 1 credit hour.

**MUS 161 Class Piano I**
Introduction to fundamentals of keyboard technique for the non-music major. May be repeated for credit. 1 credit hour.

**MUS 162 Class Piano II**
Continuation of Class Piano I (MUS 161) with emphasis on development of sight reading skills, repertoire and keyboard technique. May be repeated for credit. 1 credit hour.

**MUS 167 Introduction to Synthesizer**
Introduces the elements of sound synthesis and electronic music. Lecture and demonstration topics include basic waveform creation, basic sequencing and drum machines, MIDI and SMPTE and associated synthesizer technology. Prerequisite: MUS 256. Lab required. 2 credit hours.

**MUS 168 Introduction to Synthesizer**
Further study of the elements of sound synthesis, electronic music and computer control. Lecture and demonstration topics include timber design and computer synthesis control. Prerequisite: MUS 167. Lab required. 2 credit hours.

**MUS 170 Ensemble**
Small instrumental ensembles. Membership is through audition by the appropriate director. This course may be repeated for credit. 1 credit hour.

**MUS 180 Minor Vocal Ensembles**
Any minor vocal ensemble: choir, duet, trio, quartet. Membership is through audition by the appropriate director. This course may be repeated for credit. 1 credit hour.

**MUS 181 Music Appreciation**
Understanding music through the study of cultural periods, major composers and musical elements. 3 credit hours.

**MUS 191 Applied Music Major**
Private instruction in the area of the student’s concentration. Consisting of one 45 minute lesson per week. Fee required. 1 credit hour.

**MUS 251 Music Theory III**
A continuation of music theory including the materials of modulation, larger forms and thematic development. Prerequisite: MUS 154. Co-requisite: MUS 252. Lab required. 3 credit hours.

**MUS 252 Aural Skills III**
Aural study of superimposition, singing modulations to closely related keys, melodic and harmonic modulations, compound intervals. Prerequisite: MUS 154. Co-requisite: MUS 251. 1 credit hour.

**MUS 253 Music Theory IV**
A continuation of MUS 252 including melody, harmony, tonality and the formal processes of 20th century music. Prerequisite: MUS 251. Co-requisite: MUS 254. Lab required. 3 credit hours.

**MUS 254 Aural Skills IV**
Singing remote modulations and difficult melodies. Aural study of unusual and mixed meters; altered chords; 9th, 11th and 13th chords. Prerequisite: MUS 252. Co-requisite: MUS 253. 1 credit hour.

**MUS 255 Arranging**
Class instruction in music arranging and composition. Techniques of transposition for various instruments, music transposition techniques including computer music printing, common notational practices and alternative scoring techniques are offered through lectures and analysis of existing scores. Prerequisites: MUS 153 and MUS 154 or demonstrated competence. Lab required. 3 credit hours.

**MUS 256 Beginning Piano I**
Fundamentals of keyboard technique. Suggested for music majors. Level I. May be repeated through Level IV for credit. Lab required. 1 credit hour.

**MUS 257 Beginning Piano II**
Fundamentals of keyboard technique. Suggested for music majors. Level II. May be repeated through Level IV for credit. Lab required. 1 credit hour.

**MUS 258 Beginning Piano III**
Fundamentals of keyboard technique. Suggested for music majors. Level III. May be repeated through Level IV for credit. Lab required. 1 credit hour.

**MUS 259 Beginning Piano IV**
Fundamentals of keyboard technique. Suggested for music majors. Level IV. May be repeated for credit. 1 credit hour.

**MUS 260 Improvisation**
The creation of spontaneous melodic and harmonic ideas and the translation of these ideas into notation are emphasized. Using scales and modes, the instrumentalist improves on his or her instrument. The vocalist utilizes scat singing techniques. Prerequisites: MUS 153 and MUS 154 or demonstrated competence. Lab required. 2 credit hours.

**MUS 291 Music Literature I**
Study of selected works in music literature from major periods of music history. Topics include texture, characteristics of sound, elements and development of music. Ancient, Renaissance, Baroque and Classical eras are studied. 3 credit hours.

**MUS 292 Music Literature II**
A continuation of MUS 291. Emphasis is on Romantic, 20th century and popular music. 3 credit hours.

**MUS 295 Studio Technology Practicum**
A comprehensive study of the theory of studio, microphone and multi-track mixing equipment and techniques, to include repair, maintenance and trouble-shooting. Prerequisite: COMM 151. Lab required. 3 credit hours.

**MUS 296 Studio Production Practicum**
This course reinforces by application and demonstration the theory and skills obtained in Survey of Recording Techniques I and II and Studio Technology with emphasis on audio production in the recording studio. Prerequisite: MUS 295, or demonstrated competence approved by instructor. 3 credit hours.

**Nursing**

**NURS 147 Nursing I**
Basic course in nursing on which all other courses build and expand. Introduction to the nursing process as a problem-solving method to develop the communicative and technical skills necessary to meet basic human needs. Concepts of illness, including the surgically induced, are introduced. Through content and selected clinical experiences, students develop the ability to plan and implement nursing care for all age groups and develop skills common to all patients. Basic concepts of nutrition, pharmacology, community health and mental health. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 148. Lab required. 7 credit hours.

**NURS 148 Nursing II**
Advanced assessment skills. Application of family-centered nursing care with a focus on normal maternal and child health. Concepts of illness in all age groups include problems that alter mobility (musculo-skeletal system) and disturbances in feelings, thoughts and behaviors. Principles of nutrition, pharmacology and community health referrals. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 244. Lab required. 8 credit hours.

* Course offering pending approval of State Coordinating Board.*
**NURS 244 Nursing III**

Theoretical content continues with disturbances in feelings, thoughts and behaviors and introduces interferences with basic human needs related to problems of the reproductive and gastrointestinal body systems. Intravenous therapy is included with principles related to the administration and complications. Clinical experience in a state mental health hospital is included as a follow-up theory in mental health. Prerequisites: See Nursing Director. A grade of C or better is required to progress to NURS 2910. Lab required. 4 credit hours.

**NURS 259 Nursing IV**

Theoretical content includes major health problems of all age groups. Theory focuses on the problems of clients with disturbances of the respiratory, urinary and circulatory systems. More complex approaches to the nursing process encourage students to assimilate and synthesize nursing care planning. Team nursing is presented as a method to meet nursing needs for groups of clients. Facilities used for laboratory practice include various community health agencies. Prerequisites: See nursing director. A grade of C is required to progress to NURS 260. Lab required. 9 credit hours.

**NURS 269 Nursing V**

A continuation of Nursing IV. Focuses on the problems of clients with disturbances of the nervous, endocrine, integumentary body systems, communicable diseases and the complex problems of burns. More complex approaches to the nursing process and team nursing encourage students to assimilate and synthesize nursing care planning and implementation and evaluation. Facilities used for laboratory practice include various community health agencies. Seminar sessions enable students to review professional, ethical and legal aspects of the responsibilities of the registered nurse. To prepare the student for the graduate role, a preceptorship of clinical practice is done in the hospital setting. Each student assumes the responsibilities of the graduate nurse under the supervision of a registered nurse. Prerequisites: See Nursing Director. A grade of C is required in order to graduate. Lab required. 9 credit hours.

**OFFICE Administration**

**OFAD 120 Beginning Typewriting**

Beginning instruction for students with no previous typing instruction. Touch keyboarding techniques are developed: skills in centering, tabulating, formatting correspondence and formatting manuscripts are introduced. Lab required. 3 credit hours.

**OFAD 121 Intermediate Typewriting**

Designed to increase speed and accuracy and improve typing production rates of business correspondence, tables, forms and reports. Prerequisite: OFAD 120 or one year of high school typing. Lab required. 3 credit hours.

**OFAD 122 Advanced Typewriting**

Specialized instruction emphasizing mailable production of simulated office projects. Computers and interactive software are used for speed building to achieve individual speed and accuracy goals. Prerequisite: OFAD 121, OFAD 223. Lab required. 3 credit hours.

**OFAD 126 Beginning Shorthand**

Introduction to the principles of Gregg shorthand theory. Emphasis on ability to read, write and transcribe shorthand outlines. Prerequisite: OFAD 120. Lab required. 3 credit hours.

**OFAD 127 Intermediate Shorthand**

Shorthand theory review: development of speed building and transcription skills, including emphasis on grammar and punctuation. Prerequisite: OFAD 126, OFAD 121. Lab required. 3 credit hours.

**OFAD 131 Records Management**

Classifying documents using basic filing systems; selecting equipment and supplies; analysis and revision of files; survey of systems using electronics and micrographics. Lab required. 2 credit hours.

**OFAD 132 Proofreading/Editing**

Designed to learn proofreading and editing skills necessary to assure accuracy in written documents and business correspondence. Prerequisite: OFAD 120 or one year high school typing. Lab required. 2 credit hours.

**OFAD 133 Computer Keyboarding**

Designed to learn the computer keyboard by touch using computer-assisted instruction. Lab required. 2 credit hours.

**OFAD 134 Electronic Calculator**

Principles, procedures and techniques of operating the electronic printing calculator: emphasis on speed, accuracy, memory functions and common business mathematics. Lab required. 3 credit hours.

**OFAD 135 Business Correspondence**

Compose and evaluate effective business documents including letters, memos, reports, minutes and other correspondence. Pre-requisite: ENGL 41, OFAD 121, or OFAD 223. 3 credit hours.

**OFAD 220 Word Processing Software**

Designed to teach a word processing software program determined by local area business needs. (See appropriate class schedule for software offered.) Course may be repeated for credit as software changes. Prerequisite: OFAD 120 or one year high school typing. Lab required. 3 credit hours.

**OFAD 223 Word Processing I**

Designed to develop basic word processing skills for employment purposes or personal use. Emphasis on creating and revising documents using beginning level applications. Software is state-of-the-art subject to change reflecting business demands. See class schedule for software offered. Prerequisite: OFAD 120 or one year of high school typing and 35 wpm. Lab required. 3 credit hours.

**OFAD 224 Word Processing II**

Designed to learn the advanced features of a comprehensive word processing program using intermediate level output applications including multipage text, document assembly (macros), merges, file management and forms. Software is state-of-the-art subject to change reflecting business demands. See class schedule for software offered. Course may be repeated for credit as software changes. Prerequisite: OFAD 120 or one year of high school typing and 50 wpm. Lab required. 3 credit hours.

**OFAD 226 Word Processing III**

Designed to develop advanced skills in word processing using applications and desktop publishing projects requiring critical thinking and decision-making as expected in the workplace. Prerequisite: OFAD 121, OFAD 224 and 55 WPM. Lab required. 3 credit hours.

**OFAD 230 Office Procedures**

Acquaints students with the varied aspects of office routines. Emphasis on time management, mail responsibilities, telephone techniques, communication, job application/interviewing and other topics associated with office technology. Prerequisite: OFAD 121. Lab required. 3 credit hours.

**OFAD 237 Medical Office Procedures**

Career opportunities and qualifications for the medical secretary are explored. Emphasizes the importance of telephone procedures and making appointments; preparation of medical records; financial and legal responsibilities of billing and preparing insurance records. Prerequisite: OFAD 121, OFAD 131, HLSC 132. Lab required. 3 credit hours.

**OFAD 700 Cooperative Education**

On-the-job experience in a work assignment related to students' field of study. Credit is earned for completion of specific learning objectives and participation in OFAD co-op seminars. Seminars meet twice monthly. Prerequisite: Second year standing in career program; program coordinator approval; division dean approval. 3 credit hours.
OFAD 706 COOPERATIVE EDUCATION
Continuation of supervised on-the-job training related to students’ field of study. Learning objectives are reviewed and new ones established; continual participation in twice monthly seminars. Prerequisite: OFAD 240. 3 credit hours.

PHILOSOPHY
PHIL 151 INTRODUCTION TO PHILOSOPHY
An introduction to critical and reflective thinking as applied to basic problems of existence and the meaning of human life. Selective philosophical problems are examined through the views of major philosophers. Studies will include ancient, medieval and modern thought. 3 credit hours.

PHIL 152 LOGIC
An introduction to symbolic logic. Emphasis on logical argument, fallacies, inductive and deductive proof, and correct reasoning. 3 credit hours.

PHIL 153 ETHICS
An introduction to moral philosophy. Examines moral problems through a variety of ethical systems. Topics include the nature of good and evil, abortion, bioethics, sexuality and world hunger. 3 credit hours.

PHIL 154 COMPARATIVE RELIGION
A study of religious traditions: Eastern and Western, ancient and modern. Special emphasis on such topics as the nature of God, religious experience, immortality and human freedom. 3 credit hours.

PHIL 251 SOCIAL AND POLITICAL PHILOSOPHY
Theoretical foundations of governmental systems. Philosophers such as Plato, Hobbes, Locke, Kant and Nozick will be considered. 3 credit hours.

PHOTOGRAPHY
PHO 180 PHOTOGRAPHY I
Introduction to photography including basic camera operations, darkroom techniques, with emphasis on visual imagination and design. Lab required. 3 credit hours.

PHO 181 PHOTOGRAPHY II
Intermediate level course with continued emphasis on darkroom proficiency. Learning color photography will constitute a major part of the curriculum. Beginning study of the wq system of exposure and introduction to large format cameras. Prerequisite: PHO 180. Lab required. 3 credit hours.

PHO 240 ADVANCED COLOR PHOTOGRAPHY
A study of aesthetic and technical elements inherent to color image-making. Historical background combined with current trends will make up a foundation for critical exploration into this medium. Prerequisites: PHO 180, PHO 181. Lab required. 3 credit hours.

PHO 280 PHOTOGRAPHY • PORTRAYAL
Exploration of various photographic portrait styles, including both commercial and personal aspects of photographing the human subject. Included will be documentary photography of people, the environmental portrait and studio portraits. Creative approaches to the subject are encouraged. Prerequisite: PHO 180 or equivalent. Lab required. 3 credit hours.

PHO 281 CONTEMPORARY STUDIES IN THE VISUAL ARTS • PHOTOGRAPHY
Indepth study of concepts and practices in the visual arts. This course may be repeated three times for credit. Specialized topics of study include:

ADVANCED BLACK AND WHITE PHOTOGRAPHY
Study and use of large-formal cameras, custom paper and film developers, and application of the zone system in photography. prerequisites: PHO 180 and PHO 181. Lab required. 3 credit hours.

ADVANCED PORTRAYAL
Advanced portraiture with professional photographer’s approach. Includes advanced studio techniques working with color and black-and-white materials. Emphasis on development of personal style. Prerequisites: PHO 180, 181 and 280. Lab required. 3 credit hours.

ADVANCED COLOR PHOTOGRAPHY
Study of aesthetic and technical elements inherent to color image-making. Historical background combined with current trends make up a foundation for critical exploration into this medium. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

LARGE FORMAT PHOTOGRAPHY
Examination of the technical requirements of large-format cameras and the resulting aesthetic contribution to the photographic image. Zone system, image management, photo chemistry, darkroom procedures and contact printing are among the concepts investigated. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

DOCUMENTARY PHOTOGRAPHY
Extension of the great documentary tradition. Production of social documentary photographs centered on a community, phenomenon or dealing with issues in the urban area. Prerequisite: PHO 180. (PHO 181 also recommended) Lab required. 3 credit hours.

LANDSCAPE PHOTOGRAPHY
Exploration into the aesthetic and technical aspects of landscape as a subject. Eighteenth century modernist and post-modernist approaches to the idea of landscape as a primary source of meaning from both conceptual and design standpoints are examined. Prerequisite: PHO 180. Lab required. 3 credit hours.

DIGITAL PHOTOGRAPHY
Photography using the digital camera and learning to shoot and compose for computer imaging. Prerequisite: PHO 180. Lab required. 3 credit hours.

FASHION PHOTOGRAPHY
Study of historical and current advertising fashion techniques. Emphasis on cultural contributions and outside artistic influence. Studio and location techniques considered. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

ARCHITECTURAL PHOTOGRAPHY
Exploration into the production of architectural images that go beyond mere documentation. Aesthetics, art, expression, communication, imagination, abstraction, reality, drama and emotion are a few of the dimensions discussed focusing on sensitive photographs not dependent on the quality of the subject matter. Technical considerations include view camera technique. Prerequisites: PHO 180, 181. Lab required. 3 credit hours.

PORTFOLIO
Advanced photography for development of an artist’s portfolio of high quality images that can be shown for the purpose of obtaining commercial contracts or exhibitions. Prerequisites: PHO 180, 181 and one advanced photography course. Lab required. 3 credit hours.

ALTERNATIVE PROCESSES
Experimental, antique and non-silversum printing processes and unconventional modes of presentation. The Gum-Bichromate process, the Cyanotype, the Kwik-Print, the Van Dycke and other alternate processes. Prerequisite: PHO 180. (PHO 181 also recommended) Lab required. 3 credit hours.

PHO 290 PHOTO ILLUSTRATION
Problems and practices of photographers in news photography and in advertising. Single, multiple and electronic flash will be studied and put to use. Emphasis on lighting, large format cameras and product photography. Prerequisite: PHO 180 or consent of instructor. Lab required. 3 credit hours.

* Course offering pending approval of State Coordinating Board.
PHO 291 Photojournalism
Problems and practices of photographers on newspaper and magazine news publications. Shooting under different lighting and using flash and electronic flash will be studied. Emphasis is placed on the aesthetic and scientific issues that shape the visual literacy of today's society. From early woodcuts to high tech computer imaging, the information age is scrutinized in order to understand and appreciate photography's growing importance within the visual arts. 3 credit hours.

PHO 298 History of Photography
A study of the emergency and development of the first technological art form. Emphasis is placed upon the aesthetic and scientific issues that shape the visual literacy of today's society. From early woodcuts to high tech computer imaging, the information age is scrutinized in order to understand and appreciate photography's growing importance within the visual arts. 3 credit hours.

PHO 299 History of Film Making
An examination of the history of motion pictures and its effect on our society as well as its contribution to our culture. Emphasis will be placed on the cinema as an art form. 3 credit hours.

PHYSICS

PHYS 191 General Physics I
Algebra based physics course for the non-technical science major, such as pre-architecture, pre-biology, dental, medical, pharmacy and other. Topics include mechanics, heat and sound. Prerequisite: 2 years of high school algebra or equivalent. Lab required. 4 credit hours.

PHYS 192 General Physics II
A continuation of Physics 191. Includes topics of electricity, magnetism, light, optics and relativity. Prerequisite: PHYS 191. Lab required. 4 credit hours.

PHYS 291 College Physics I
A calculus based analysis of classical Newtonian physics designed to meet the needs of science majors, premed, dental, or engineering students. Topics include laws of motion, force, momentum, work and energy, angular momentum, and rotational and oscillatory motion. Laboratory experiments reinforce concepts presented in lecture. Prerequisite: MATH 192. Lab required. 4 credit hours.

PHYS 292 College Physics II
A continuation of Physics 291 that addresses electric fields, AC and DC currents, dielectrics magnetic fields, magnetic properties of matter, inductance, electromagnetic properties of waves, optics and concepts of modern physics. Laboratory experiments reinforce principles presented in lecture. Prerequisite: PHYS 291. Lab required. 4 credit hours.

POLITICAL SCIENCE

PLSC 155 Introduction to Political Science
Introduction to the history and methods of political science. Includes an examination of the basic concepts of politics and political behavior, an overview of the history of the discipline, the scope and methods of political inquiry and an exploration of the basic models of politics that operate in the modern world. This course does not apply toward the Texas legislative requirement of 6 credit hours of American Government for baccalaureate degrees. Lab required. 3 credit hours.

PLSC 261 American Government I
Introduction to the study of politics and government in the United States. Topics include the origin and development of constitutional democracy in the United States, emphasizing the constitutions of the United States and the state of Texas, federalism and intergovernmental relations, local government and the political process. (This course may not be taken if the student has received credit for Government 262.) Lab required. 3 credit hours.

PLSC 262 American Government II
Examines the institutional structures of government at both national and state levels (emphasizing Texas), including the legislative process, the executive and bureaucratic structures and the judicial process. Additional topics include civil rights and civil liberties, foreign relations and national defense. (This course may not be taken if the student has received credit for Government 251.) Lab required. 3 credit hours.

PLSC 263 International Relations
Introduction to the study of international relations particularly emphasizing those factors which contribute to both conflict and cooperation between nations. Topics include the nation-state system, international economics, international law, security and arms control, and international organizations. Lab required. 3 credit hours.

PLSC 264 Comparative Politics
Introduction to the study of comparative political institutions. Topics include the history and methods of comparative political analysis, political socialization and political behavior, the creation of public policy and the politics of major world powers. Lab required. 3 credit hours.

PLSC 700 Political Science Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

PHYSICAL SCIENCE

PSCI 151 Physical Science I
Survey of the principles of physics and chemistry. Topics include: heat, light, sound, matter, Newtonian physics, electricity and magnetism, gas laws and optics. Prerequisite: MATH 120 or equivalent. Lab required. 4 credit hours.

PSCI 152 Physical Science II
Survey of the principles of astronomy, meteorology and geology. Topics include: weather and climate, rocks and minerals, erosion, the solar system, stars and galaxies. Prerequisite: MATH 120 or equivalent. Lab required. 4 credit hours.

PSCI 153 Elementary Astronomy
Introduction to the solar system, stars, stellar groupings and galaxies; telescopes and other astronomical instruments are discussed. Physical characteristics of the motion of bodies in the solar system are studied along with stellar evolution, supernova, black holes, neutron stars, comets and pulsars. Laboratory exercises, night observations, planetarium and observatory visits all combine to enhance lecture material. Lab required. 4 credit hours.

PSCI 154 Earth Science
Concepts of earth processes and relation to man including basic principles from physical and historical geology, oceanography and meteorology for the non-science major. Lab required. 4 credit hours.

PSCI 700 Physical Science Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor and the instructor coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

PSYCHOLOGY

PSCI 121 Applied Psychology
Surveys the applications of psychological knowledge and methodology in the fields of business, industry, education, medicine, law enforcement and government work. Emphasis on group dynamics and adjustment factors for employment and advancement. Lab required. 3 credit hours.
psrc 151 General Psychology
Introduces the student to the major topics in scientific psychology as applied to human behavior. Topics include research methods, physiological factors, learning, motivation, emotions, personality, adjustment, stress, psychological disorders and therapies. Application of these principles will be made to the human experience. Lab required. 3 credit hours.

PSYC 153 Human Sexuality
Designed to assist the student in understanding human sexuality including an appreciation of different approaches to sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life. A student may register for this course as PSYC 153 or SOC 153, but not for both. 3 credit hours.

psrc 155 Psychological Adjustment
Psychological theory will be presented enabling students to gain insight into adjustment topics that can be applied to their own lives and the lives of those around them. 3 credit hours.

psrc 251 Life Span Psychology
A life-span approach to human development studying the processes of life from conception through adulthood and aging. Information on physical, cognitive, and psychosocial aspects of human growth, development and behavior is included. Application of these principles will be made to daily lifestyles. Prerequisite: PSYC 151. Lab required. 3 credit hours.

psrc 252 Social Psychology
Research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, aggression, conformity, communication, values, roles and group processes. Application of these principles will be made to the human experience. A student may register for this course as PSYC 252 or SOC 252, but not both. Prerequisite: PSYC 151 or SOC 151. Lab required. 3 credit hours.

psrc 253 Psychology of Personality
An in-depth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also included. Prerequisite: PSYC 151. Lab required. 3 credit hours.

psrc 255 Drug Use and Abuse
A view of the individual, the substance and the cultural context in which they interact. This course is designed to provide a basic understanding of the psychopharmacology of drugs used and abused in today's society. The emphasis of the study will be the major perspectives of drug use including legal, moral, public health, disease model, psycho-social and socio-cultural. Students may enroll in either PSYC 255 or SOC 255, but not both. 3 credit hours.

PSYC 297 Selected Topics in Psychology
An in-depth study of selected topics on current issues in psychology. Course may be repeated for credit as topics vary. 3 credit hours.

psrc 700 Psychology Internship
Designed to integrate on-campus classroom study with off-campus work experience. The student, the student's supervisor and the instructor coordinator will establish specific goals for the student to accomplish. Also requires one hour per week of lecture. Prerequisite: Consent of instructor. 3 credit hours.

Reading

READ 040 Developmental Reading I
Designed to raise the reading level of students reading on levels 6 through 7 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. This class may not be used to satisfy the requirements of an associate degree. Prerequisite: Assessment. 1 credit hour.

READ 041 Developmental Reading II
Designed to raise the reading level of students reading on level 8 through 9 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. This course may not be used to satisfy the requirements of an associate degree. Prerequisite: Assessment. 1 credit hour.

READ 042 Developmental Reading III
Designed to raise the reading level of students reading on level 10 through 12 by improving skills in vocabulary and comprehension. A modular approach following individual prescription is used. This course may not be used to satisfy the requirements of an associate degree. Prerequisite: Assessment. 1 credit hour.

READ 101 Analytical Reading and Critical Thinking
An in-depth inquiry to improve comprehension in non-fiction material. The development of interpretive comprehension skill and expansion of these skills into higher level analysis, synthesis, and evaluative processes will be emphasized. Prerequisite: Assessment. Lab required. 3 credit hours.

Real Estate

RLST 133 Real Estate Principles I
Fundamental principles of real estate. Emphasis on property rights, property ownership, listing procedures, legal descriptions, real estate contracts, control and transfer of real properties, the professional ethics and activities of real estate brokers and the Real Estate License Law. Includes a three-hour overview of Principles I. (Core Course). 3 credit hours.

RUT 134 Real Estate Principles II
Fundamental principles and practices of real estate. Emphasis on property management, real estate appraisal, real estate investment, closing the real estate transaction and three hours of Federal Fair Housing, Community Reinvestment Act and Equal Credit Opportunity Act. Includes a three-hour review of Principles I. (Core Course). 3 credit hours.

RUT 135 Real Estate Appraisal
Includes the central purposes and functions of an appraisal, social and economic determinant of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations and reporting. (Core Course). 3 credit hours.

RUT 136 Real Estate Math
Review of mathematical logic and arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration and estimation of closing statements. (Core Course). 3 credit hours.

RUT 138 Real Estate Sales and Marketing
Includes real estate professionalism and ethics, characteristics of successful salespeople, time management, psychology of marketing, listing procedure, advertising, negotiating and closing, financing and the Deceptive Trade Practices-Consumer Protection Act. (Core Course). 3 credit hours.

RUT 139 Real Estate Law + Contracts
Six classroom hours reviewing subjects required by the Real Estate License Act with emphasis on general contract law requirements and thorough coverage of the purpose, history and working process of the broker-lawyer committee. Detailed instruction and maximum hands-on exercises in the preparation of all promulgated contract forms. (Core Course). In lieu: RLST 134 or consent of discipline coordinator. 3 credit hours.

RUT 234 Real Estate Investments
Financing, evaluation and management of real estate investments. Real estate investment characteristics, techniques of investment and analysis, discount and non-discounted investment criteria, time-valued money, leverage, tax shelters and consideration, investment risks and application to property tax. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.
RLST 235 Real Estate Finance
Includes monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments. Equal Credit Opportunity Acts, Community Reinvestment Act and State Housing Agency. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 236 Real Estate Property Management
Includes role of a property manager, landlord policies, operational guidelines. lease, lease negotiations, tenant relations, maintenance reports, habitability laws and the Fair Housing Act. (Core Course). 3 credit hours.

RLST 237 Real Estate Law
Includes the legal concepts of real estate, land description, real property rights and estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures and evidence of titles. (Core Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 238 Real Estate, Title Abstract, Escrow
Legal and procedural aspects of handling titles, abstracts and escrows. Common office practices and closing procedures. (Related Course). Prerequisite: RLST 134 or consent of discipline coordinator. 3 credit hours.

RLST 241 Real Estate Commercial
A study of the commercial class of real estate. Considering the developing, appraising, marketing, contracting and financing functions related to business properties, including office building, shopping centers, stores, hotels and parking facilities. (Related Course). 3 credit hours.

RLST 242 Real Estate Financial Analysis
Financial applications useful to real estate professionals. Real estate students and serious real estate investors. The emphasis is on the use of hand-held HP-12C calculator as a tool to analyze the many financial problem situations that agents encounter in the business. Topics include loan calculation, net present value, internal rate of return, discounting, depreciation, programming techniques and more. (Related Course). Prerequisite: RLST 134; MUST have a HP-12C calculator or HP-12C calculator. 3 credit hours.

RLST 251 Real Estate Brokerage
Study of the brokerage business including planning and organization, operational policies and procedures, personnel recruiting, selection and training, record keeping and control analysis of real estate firm, criteria for expansion and a study of the law of agency. (Core Course). Prerequisite: RLST 134. 3 credit hours.

RLST 297 Real Estate Special Topics
This course is designed to provide current legal, judicial, legislative and regulatory information for the real estate licensee, as well as, the advanced real estate student. Prerequisites will vary based on topics covered and will be announced in each semester’s class schedule. Course may be repeated for credit as topics vary. (Related course). 1 credit hour.

RLST 700 Cooperative Education I
Designed to integrate on-campus study with off-campus work experience. The student, the student's supervisor and the instructor-coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. 3 credit hours.

RLST 705 Cooperative Education II
Designed to integrate on-campus study with off-campus work experience. The student, the student’s supervisor and the instructor-coordinator will establish five specific goals for the student to accomplish. Also requires one hour per week of lecture. (Related course). 3 credit hours.

Respiratory Care
RTP 112 Cardiopulmonary Anatomy and Physiology
Aspects of the heart, lungs, kidneys and brain related to respiratory care practice. Prerequisite: Admittance to program. Lab required. 2 credit hours.

RTP 113 Basic Respiratory Therapy
Basic scientific concepts related to respiratory care. Prerequisite: Admittance to program. 3 credit hours.

RTP 114 Respiratory Clinical Orientation
Theory, clinical application of basic respiratory care procedures and responsibilities. Prerequisite: Admittance to program. Lab required. 4 credit hours.

RTP 115 Respiratory Technology I
Theory and laboratory application of basic respiratory care procedures. Prerequisite: Admittance to program. Lab required. 4 credit hours.

RTP 120 Respiratory Pathology
Theory and application of respiratory care related to diseases. Prerequisite: Permission of instructor. 3 credit hours.

RTP 121 Pediatric Respiratory Care
Theory and application of respiratory care for pre-adult patients. Prerequisite: Permission of instructor. 1 credit hour.

RTP 122 Respiratory Pharmacology
Entry level aspects of respiratory care pharmacology. Prerequisite: Permission of instructor. 2 credit hours.

RTP 124 Respiratory Technology II
Theory and laboratory application of advanced respiratory care procedures. Prerequisite: Permission of instructor. Lab required. 4 credit hours.

RTP 125 Clinical Procedures I
Clinical applications of respiratory therapy procedures including ICU, general therapy, FFT/ABG, EKG. PEDIMSY, PRM. Prerequisite: Permission of instructor. 3 credit hours.

RTP 126 Clinical Procedures II
Clinical applications of respiratory therapy care including additional skills in ICU, general therapy, FFT/ABG, EKG, PEDIMSY. Prerequisite: Permission of instructor. 3 credit hours.

RTP 213 Clinical Practice I
Clinical application with emphasis on advanced-level application of respiratory care procedures. Prerequisite: Permission of instructor. 2 credit hours.

RTP 214 Respiratory Technology III
Advanced technology in skills and knowledge including respiratory care of newborn and adult ventilator procedures. Prerequisite: Permission of instructor. Lab required. 4 credit hours.

RTP 115 Advanced Cardiopulmonary Topics
Advanced-level respiratory care topics. Prerequisite: Permission of instructor. 3 credit hours.

RTP 220 Respiratory Care Planning
Advanced-level respiratory care topics and care plans. Prerequisite: Permission of instructor. 3 credit hours.

RTP 221 Applied Cardiopulmonary Pathology
Advanced-level emphasis on pathophysiology of pulmonary function. Prerequisite: Permission of instructor. 3 credit hours.

RTP 223 Clinical Practice II
Advanced clinical applications with emphasis on critical evaluation of patient care. Prerequisite: Permission of instructor. 1 credit hour.
**RUSSIAN**

**RUSN 191 BEGINNING RUSSIAN I**
Introduction to the basic skills of speaking, reading, writing and listening. Designed for students with little or no previous language training. Includes an introduction to Russian culture. Instruction is enhanced by the use of audio tapes, slides, computer software and video cassettes. Lab required. 4 credit hours.

**RUSN 192 BEGINNING RUSSIAN II**
A continuation of Russian 191. Prerequisite: RUSN 191 or equivalent. Lab required. 4 credit hours.

**SMALL BUSINESS MANAGEMENT**

**SBMT 121 SMALL BUSINESS MANAGEMENT**
Introduction to planning, establishing and operating a small business; managing employees, records and control systems; product and services marketing. 3 credit hours.

**SBMT 221 SMALL BUSINESS FINANCING**
Financial planning, use of financial data, forecasting financial needs, control of cash and other assets, capital budgeting. Acquisition, utilization, financial sources. Prerequisite: SBMT 121. 3 credit hours.

**SBMT 223 ENTREPRENEURSHIP**
Business idea development and implementation. A hands-on approach to business planning, feasibility studies, market analysis and venture financing. Students should have completed SBMT 121 prior to this course.

**SBMT 700 COOPERATIVE EDUCATION I**
Designed to help the student integrate classroom knowledge with work experience. The student, the student’s supervisor and the instructor coordinate a set of goals for the student to accomplish. 3 credit hours.

**SBMT 705 COOPERATIVE EDUCATION II**
Designed to help the student integrate classroom knowledge with work experience. The student, the student’s supervisor and the instructor coordinate a set of goals for the student to accomplish. Prerequisite: SBMT 700. 3 credit hours.

**SOCIOLOGY**

**SOC 151 INTRODUCTION TO SOCIOLOGY**
An introduction to the social science concerned with humans and their relationships with members of the group and world in which they live. The following aspects of social life will be applied to the human experience: social forces, culture, socialization, deviance, sexuality, gender roles, race relations, social stratification and family. Lab required. 3 credit hours.

**SOC 152 SOCIAL PROBLEMS**
An in-depth examination of selected social problems. Their nature, cause, extent and effect upon society. Emphasis will be on the study of specific social problems of the local area. Topics include: abortion, suicide, family violence, sexual variance, and crime and punishment. Lab required. 3 credit hours.

**SOC 153 HUMAN SEXUALITY**
Designed to assist the student in the understanding of human sexuality including an appreciation of different approaches to sexuality as well as an awareness of one’s own sexuality and its impact on adjustment to life. A student may register for this course as Psychology 153 or Sociology 153, but not for both. 3 credit hours.

**SOC 251 MARRIAGE AND FAMILY**
A functional and empathetic approach to understanding the structural developmental and institutional aspects of marriage and the family. Emphasis on the American family with consideration given to courtship, mate selection, marriage and its dynamics, conflict, family violence, child-rearing patterns, the later years of marriage, divorce and remarriage. Lab required. 3 credit hours.

**SOC 252 SOCIAL PSYCHOLOGY**
A study of research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, conformity, communication, values, roles and group processes. Application of these principles will be made to the human experience. A student may register for this course as Psychology 252 or Sociology 252, but not both. Prerequisite: PSYC 151 or SOC 151. Lab required. 3 credit hours.

**SOC 253 MINORITY STUDIES**
The historical, economic, social and cultural development of minority groups in American society. Includes the causes and consequences of prejudice and discrimination. Lab required. 3 credit hours.

**SOC 255 DRUG USE AND ABUSE**
A view of the individual, the substance and the cultural context in which they interact. This course is designed to provide a basic understanding of the psychopharmacology of drugs used and abused in today’s society. The emphasis of the study will be on a perspective of drug use including legal, moral, public health, disease model, psychosocial and socio-cultural. Students may enroll in either Psychology 255 or in Sociology 255, but not in both. 3 credit hours.

**SOC 297 SELECTED TOPICS IN SOCIOLOGY**
An in-depth study of selected topics on current issues in sociology. Course may be repeated for credit as topics vary. 3 credit hours.

**SPANISH**

**SPAN 191 BEGINNING SPANISH I**
An introduction to the four basic skills of speaking, reading, writing and listening. Designed for students with little or no previous language training. Includes an introduction to aspects of Hispanic civilization. Instruction enhanced by the use of slides, tapes, computer software and video cassettes. Lab required. 4 credit hours.

**SPAN 192 BEGINNING SPANISH II**
A continuation of Spanish 191. Prerequisite: SPAN 191. Lab required. 4 credit hours.

**SPAN 291 INTERMEDIATE SPANISH I**
An intensive review of Spanish grammar followed by continued development of speaking, listening, reading and writing skills. Instruction enhanced by the use of slides and other audio-visual aids. Prerequisite: SPAN 192 or consent of discipline coordinator. Lab required. 3 credit hours.

**SPAN 292 INTERMEDIATE SPANISH II**
A continuation of Spanish 291. Extensive written and oral work and extensive reading of literary works in Spanish of moderate difficulty. Prerequisite: SPAN 291. 3 credit hours.

**SPAN 293 CONVERSATIONAL SPANISH I**
Intensive practice in conversational Spanish. Prerequisite: SPAN 192 or consent of discipline coordinator. 1 Credit hour.

**SPAN 294 CONVERSATIONAL SPANISH II**
A continuation of Spanish 293. Prerequisite: SPAN 293 or equivalent. 1 credit hour.

**SPAN 295 SPANISH LITERATURE I**
A study of Spanish literature from its origin to 1700 through lectures, discussions and reading of major literary works. Some attention will also be given to the historical context of each work. Prerequisite: SPAN 292. 3 credit hours.

**SPAN 296 SPANISH LITERATURE II**
A study of Spanish literature from 1700 to the present. Discussions, lectures and readings of major literary works with some attention to historical context. A continuation of Spanish 295. Prerequisite: SPAN 295. 3 credit hours.
SPEECH COMMUNICATION

SPCM 151 Fundamentals of Speech Communication
Survey of basic factors affecting human interaction through communication; emphasis on the development of oral communication competencies; practice in delivering oral presentations. 3 credit hours.

SPCM 152 Public Speaking
Study and practice in the preparation and delivery of speeches; practice in different types of speeches and forms of delivery; evaluation of speakers and speeches. 3 credit hours.

SPCM 153 Advanced Public Speaking
Advanced skills and techniques of speaking. Includes impromptu and extemporaneous speaking, congressional speaking and the use of parliamentary procedure, and speaking before large audiences. Prerequisite: SPCM 152.3 credit hours.

SPCM 191 Argumentation and Debate
Training in clear, logical, decision-making communication; analysis, exposition, reasoning and use of evidence; practice in effective delivery of arguments for and against various issues. 3 credit hours.

SPCM 192 Forensics Workshop
Preparation and practice in debate and contest speaking activities; participation in intercollegiate and intersquad forensic activities; involvement in supervised research and the development of specialized contest speaking skills. Course may be repeated for credit. Prerequisite: SPCM 152 or consent of instructor. 1 credit hour.

SPCM 193 Sign Language I
Basic manual communication skills including the American Manual Alphabet; approximately 550 basic signs; the history and place of manual communication in society. Lab required. 3 credit hours.

SPCM 194 Sign Language II
Continuation of Speech Communication 181; conversational manual communication; implementation of basic vocabulary learned in the beginning course; the psychology of Deafness. Prerequisite: SPCM 193. Lab required. 3 credit hours.

SPCM 291 Oral Interpretation
Introduction to the techniques of interpretation; preparation, analysis, reading of poetry, prose and dramatic literature; analysis and criticism of a variety of literary forms. Prerequisite: SPCM 152. 3 credit hours.

SPCM 292 Language and Communication
Appreciation of interdisciplinary approaches to the study of language; comprehension of viewpoints offered by various fields. Prerequisite: SPCM 151. 3 credit hours.

SPCM 293 Business and Professional Speaking
Study of the importance of oral communication in business; practice in small group communication; study of the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. 3 credit hours.

SPCM 294 Interpersonal Communication
The study of verbal and nonverbal communication as it primarily relates to persons in relationships. Emphasis in interpersonal contexts such as communication between the sexes, familial relationships and intercultural communication. Prerequisite or Co-requisite: SPCM 151 or consent of instructor. 3 credit hours.

SPCM 295 Radio and TV Announcing
A course in the principles of, and practice in, radio and TV announcing including the study of voice (diction, pronunciation and delivery) as it relates to mediated contexts and experience in news announcing, interviewing and commercial acting. Prerequisite or Co-requisite: SPCM 152. 3 credit hours.

SPCM 296 Radio/Television News
The preparation and analysis of news styles for the electronic media. Prerequisite or Co-requisite: SPCM 152. 3 credit hours.

THEATRE

THEA 151 Introduction to the Theatre
Various aspects of theatre are surveyed. Emphasis is on types of plays, directing, acting and technical production. Lab required. 3 credit hours.

THEA 185 Stagecraft
The study and application of the visual aesthetics of design which may include the physical theatre, scenery construction and painting, properties, lighting, costumes, make-up and backstage organizations. Lab required. 3 credit hours.

THEA 190 Theatre Practicum I
A practicum in theatre with emphasis on performance techniques and procedures. The student gains theatrical experience by assuming a major performance role in a college play. May be combined with THEA 191 or repeated for a maximum total of 6 credit hours. 2 credit hours.

THEA 191 Theatre Practicum I Technical
A practicum in theatre with emphasis on technical techniques and procedures. Students gain theatrical experience by assuming major technical responsibilities in the production of a college play. May be combined with THEA 190 or repeated for a maximum total of 6 credit hours. 2 credit hours.

THEA 192 Voice and Diction
Intensive work is provided in the improvement of voice through exercises to develop resonance, range, flexibility, intensity, control of voice. 3 credit hours.

THEA 193 Acting I
Introduction to the art of acting. Body control, voice, pantomime, interpretation, characterization and stage movement are included. Lab required. 3 credit hours.

THEA 194 Acting II
A continuation of Theatre 193. Emphasis is on complex characterization, ensemble acting, stylized acting and acting in period plays. Prerequisite: THEA 193. Lab required. 3 credit hours.
Abbott-White, Jessie
Programmer I
B.S., University of North Texas

Adams, Glenn
Professor, Computer Aided Design/Engineering
M.S., University of Texas at El Paso
B.S., Tarleton State University

Adler, William
Professor, Psychology
Ph.D., University of North Texas
M.A., Southern Methodist University
B.A., Temple University

Afendis, M.S.
Engineering Professor, Computer Aided Engineering

Allison, Brian
B.S., Susquehanna University

Alareon, Miguel
Physical Plant Worker

Allen, Toni P.
Dean, Enrollment Management
M.S., University of North Texas
B.S., Arizona State University

Alison, Brian
Professor, English
Ph.D., University of London
M.A., Southern Methodist University
B.A., University of Texas at Austin

Anglin, Deborah
Coordinator, Student Peer Tutoring
B.A., Texas Tech University

Anthony, John H.
President
Ed.D., Temple University
M.Ed., Temple University
B.S., Susquehanna University

Ardiz, William
Professor, Mathematics
M.S., University of Texas at Dallas
B.S., University of Texas at Dallas

Armijo, Julio
Physical Plant Worker
Austin, Juanita

Arnold, Developmental Education
S.C.T., Murray State University
M.A., Murray State University
B.S., Lane College

Artzy, Joanne
Professor, Computer Information Systems
M.B.A., West Texas State University
B.B.A., West Texas State University
B.S., University of North Texas

Atlanta, Trae
Clerk, ALL

Akins, Lee
Professor, Art
M.F.A., Southern Methodist University
B.F.A., College of the Dayton Art Institute

Alaldein, Ghazi
Instructor, Associate, Biology
B.S., Texas A & M University

Aghoaye, Afendis
M.S.
Engineering Professor, Computer Aided Engineering

Baker, Arlene
Instructional Associate, Mathematics
B.S., Towson State University

Baker, John
Professor, Electronics
B.A.A.S., University of North Texas

Baker, Robin
Software Support Technician
B.A., McMurry College

Baker, Wesley
Instructional Associate, Mathematics
B.S., Texas State University

Baldwin, Tracy
Clerk, ALL

Ball, Michael
Professor, Biology
M.S., Memphis State University
B.A., Hendrix College

Bennett, Bridget A.
Records Assistant, Registrar's Office

Berryman, Martin Q.
Professor, HPED and Tennis Coach
M.S., East Texas State University
B.S., East Texas State University

Boatright, Cheryl
Division Secretary, Business and Engineering
A.A., Collin County Community College

Bolliver, Doug
Instructional Associate, Biology
B.S., Gannon University

Boring, Brian
Telecommunication Analyst
B.A., University of North Texas

Boyce, John
Physical Plant Worker

Boyce, Rodney
Professor, Humanities
M.F.A., California State University
M.A., California State University
B.F.A., North Texas State University

Bradford, Johnnie
Child Development Teacher
A.S., Los Medano College

Brown, Jacquelyn
Professor, Nursing
M.S.N., University of North Texas

Brown, Nancy
Administrative Assistant, Social Sciences
B.S., Middle Tennessee State University

Brown, Peggy
Professor, English/Humanities
B.A., University of Texas at Dallas

Broyles, Bobby
Maintenance Painter/Carpenter

Broyles, Michael
Professor, Physics
M.S., University of Hawaii
M.S.T., University of Wisconsin
B.A., San Francisco State University

Burch, Peggy
Financial Aid/VA Associate
A.A., Collin County Community College

Burgett, Carolyn
Internal Auditor
B.A.A., Tarleton State University

Burton, Wendy
Coordinator, Instructional Television
B.B.A., Hadin-Simmons University

Campbell, Richard
Physical Plant Worker

Canady, Walter
R.F. Technician

Carrillo, Stephen M.
Computer Operations Specialist

Carstens, Donna
Payroll/Cashier Clerk

Cavanaugh, Helese
Coordinator, Job Developer
M.A., Lesley College
B.S., Northeastern University

Chacon, Sara
Division Secretary, Dean of Students

Chatham, Craig J.
Technical Support Specialist

Cohick, Michael
Professor, Economics
Ph.D., University of North Texas
M.A., Webster University
M.S., University of Washington
B.S., Pennsylvania State University
B.S., University of Utah

Collins, Billie K.
Director of Articulation and Transfer Programs
B.S., Texas Woman's University

Collins, Larry
Professor, History
M.A., University of North Texas
B.A., University of North Texas
DeGregor, Patricia
Professor, Office Administration
M.S., Northern Illinois University
B.S., Illinois State University

DeLeon, Glenda M.
Testing Center Specialist
A.A., Collin County Community College

Dennis, Greg
Professor, HPED and Baseball Coach
M.S., Baylor University
B.S., Baylor University

Desoyza, Kumi
Clerk, Testing Center

Devitt, Barbara
Professor, Nursing
M.S.N., University of Nebraska
B.S.N., University of Nebraska

Dickman, Mary L.
Administrative Assistant, Cooperative Work Experience

DeWes, Steve
Clinical Coordinator, Respiratory Care
A.A.S., Odessa College

Dillingham, William H.
Director, Computer Services
B.B.A., Abilene Christian University

Dobbs, Vickie J.
Division Secretary, Financial Aid
B.S., East Texas State University

Dolinc, Cheri A.
Student Development Advisor
M.S., University of Wisconsin, Madison
B.S., University of Wisconsin, Stevens Point

Ducote, Richard
Dean, Library/Learning Resources Center
M.S., Louisiana State University
B.S., Louisiana State University

Duffer, Cynthia
Accounting Clerk, Bookstore

Duncan, Jack
Employment Training Coordinator
JTPA

Dunham, Kathy
Secretary, Enterprise
A.A., Collin County Community College

Dunlop, Ruth
Division Secretary, Science, Health and Social Science

Dupont, Helen E.
Human Resources Specialist

Durbin, Diane
Circulation Assistant

Dyart, Patricia
Secretary, Business and Engineering

Edwards, Jeff
Professor, Economics
M.S., University of Arkansas
B.A., University of Arkansas

El-Ashmay, Amina
Professor, Chemistry
M.S., Texas A&M University
B.A., Texas A&M University

Emerson, Mary
Professor, CIS
M.A., University of North Texas
B.A., East Central State University

Erickson, Craig
Technical Director, Theatre
B.F.A., University of Texas at Austin

Bubanks, Barbara
Director, Cooperative Work Experience
M.B.A., University of Houston/Clear Lake
B.A., Southeastern Louisiana University

Alías, Texas Southmost College
Evans, D. Mark
Accounts Payable Supervisor

Ewing, Martha M.
Professor, Psychology
M.S., University of Texas at Dallas
B.A., American Christian College

Farr, Kent
Systems Analyst/Programmer
B.B.A., University of Oklahoma

Farrar, Susan B.
Director of Academic Computing
M.S., University of Texas at Austin
B.S., University of Wisconsin

Farrell, Karen
Reference Librarian
M.Ed., University of Arizona
M.L.S., University of North Texas
B.A., University of Texas at Arlington

Fields, Mary C.
Professor, Chemistry
M.S., University of South Carolina
B.S., Francis Marion College

Fields, Todd
Accounting Clerk, Bookstore
B.S., East Central University

Fitz-Gerald, Jimmy
Student Development Advisor
B.S., Texas Tech University

Flores, Modesto
Physical Plant Worker, SC

Forsham-Evans, Susan
Professor, HPED and Volleyball Coach
M.A., Texas Woman's University
B.S., East Stroudsburg State University

Fowler, Carol
Secretary, Small Business Development Center
A.A., Panola Junior College

Freiman, Karen
Assistant Director, JTPA
M.Ed., University of Arizona
B.S., Denison University

Furnas, Sue
Administrative Assistant, Business and Engineering
A.A.S., Collin County Community College

Garcia, Dawn
Circulation Assistant, LRC
B.A., Austin College

Garcia, Manuel
Groundskeeper

Garrison, Allan
Systems Manager/Programmer
B.B.A., West Texas State University

Gary, David
Professor, Political Science
Ph.D., University of North Texas
M.A., University of Arkansas,
Fayetteville

Gea, Leslie
Programmer Analyst/Liaison
Enrollment Management
B.S., Park College

Gerard, Charlene
Job Developer, Employment Resource Center
M.Ed., East Texas State University
B.A., State University of Iowa

Gilmore, Terry
Professor, Respiratory Care
B.S., Southwest Texas State University

Comley, Anita
Professor, Nursing
M.S.N., Owneyd Mercy College
B.S.N., Indiana University of Pennsylvania

Connors, Betty
Associate Registrar

Conn, Linda
Professor, Developmental Writing
M.A., Louisiana Tech University
B.A., Louisiana Tech University

Corner, Barbara D.
Division Secretary, Physical Plant, SCC
B.S., Abilene Christian University

Cotter, Cathy M.
Professor, Art
M.A., East Texas State University
B.S., East Texas State University

Coughlin, Vickie L.
Financial Aid/VA Associate
B.A., University of Texas at Dallas
A.A., Kansas City Community College

Coulter, Matthew
Professor, History
M.A., Southern Illinois University
B.S., Southern Illinois University

Cowen, Elizabeth
Circulation Assistant
B.A., University of Oklahoma

Crawford, Joan
Secretary, Testing Center

Crawford, Michel
Professor, Music
M.A., Eastern Washington University
B.A., Eastern Washington University

Crowell, Rebecca C.
Admissions Associate

Culherson, Mary
Director of Admissions
B.A., Midwestern State University

Cunningham, Billie
Professor, Accounting
Ph.D., University of North Texas
M.B.A., University of North Texas
B.B.A., University of North Texas

Daugherty, Janet
MIS Intake, JTPA
Gnrder, Barbara
Manager, Benefits and Employee Relations
B.A., Michigan State University

Harris, Vicki B.
Registrar
B.S., University of Texas at Dallas
A.A., Collin County Community College

Hart, John
Assistant to the Vice President of Instruction
M.S., Washington State University
B.S., Oregon State University

Hayden, Karen
Professor, Developmental Writing
M.A., University of Texas at Arlington
B.A., University of Texas at Arlington

Hays, Keith
Professor, Music
M.M., Southern Methodist University
B.M., Henderson State University

Helgeson, Jean
Professor, Biology
M.A., Southwestern Graduate School, UTHSCD
B.S., University of Oklahoma

Henderson, Freddy
Network Security Technician
B.A., University of North Texas

Herren, Silvia
Physical Plant Worker

Hight, Gina
Secretary, Law Enforcement

Hill, Betty L.
Enrollment Reports Associate

Hobbs, David
Coordinator, Technical Services

Hodge, Gary
Professor, Sociology
M.A., Texas Christian University
B.A., University of Texas at Arlington

Hollander, Dennis
Programmer II
A.A., Community College of Air Force
A.A., University of Maryland

Hollowey, Mary Jane
Data Entry Clerk

Hosack, Sharon
Professor, Mathematics
M.S., Florida State University
B.A., South Florida University

Howard, Tony J.
Professor, English
M.A., Southern Methodist University
B.A., University of Texas at Dallas

Howry, Cindy K.
Professor, Computer Science and Software Development
M.S., University of North Texas
B.S., University of North Texas

Huey, Peter
Professor, Accounting
M.B.A., Central Oklahoma State University
B.B.A., Southwestern Oklahoma State University

Ingram, Stephanie M.
Career Advising Associate, Future Shop
B.S., Texas Woman's University

Ivy, Sanford G.
Maintenance Technician/Craftsman

Jack, Billy
Building Service Helper

Jackson, Ron
Assistant Director, Plant Operations

James, Bill
Computer Operator

James, Washington
Professor, Computer Information Systems
M.B.A., Golden Gate University
B.S., Park College
A.A., Northern Virginia Community College

Jaynes, Joe
Professor, History
M.S., East Texas State University
B.S., East Texas State University

Jenkins, Carol L.
Student Activities Associate
A.A., Lansing Community College

Jenkins, Joan
Professor, History
Ph.D., University of North Texas
M.A., University of North Texas
B.A., University of Texas at Austin

Jennings, Cynthia
Clerk/Cashier

Johnson, Charles
Professor, Math
Ph.D., University of North Texas
M.S., Northwestern State University
B.S., Northwestern State University

Johnson, Norma
Student Development Advisor
M.A., Texas Woman's University
B.S., Southern University

Johnson, Yvonne
Professor, History
M.A., University of Colorado
B.S., University of Arkansas, Fayetteville

Jones, Frank
Evening Registration Specialist, Registrar's Office

Jones, Dorothy
Records Assistant, Registrar's Office

Jones, Susan
Assistant Manager, Bookstore

Jones, Marti
Secretary, Purchasing

Jones, Cara
Assistant, Registrar's Office

Jones, Matthew
Central Campus

Justice, Pamela
Professor, Physics
Ph.D., Pennsylvania State University
M.S., Pennsylvania State University
B.A., Albion College

Kappoun, Sheryl S.
Dean, Science and Health Division
M.S., Texas Woman's University
B.S., University of South Alabama

Kart, Rosemary
Professor, Developmental Mathematics
M.A., Eastern Kentucky University
B.S., Eastern Kentucky University

Keahey, Marlene V.
Secretary, JTPA

Kelly, William
Administrative Assistant, Arts & Humanities
Mullins, John  
Reference Librarian  
M.L.S., University of Texas at Austin  
B.A., University of Iowa

Murphy, Darla  
Secretary, Resource Development  
A.S., Angelina College, Lufkin  
A.A.S., El Centro College, Dallas

Nelson, Rex  
Professor, Emergency Medical Services  
A.S., Lufkin College

Niswonger, Audrey  
Counselor/Advisor, Project SPARK  
B.S., Winston Salem State College

O'Connell, Kevla  
Computer Lab Associate  
B.A., Sonoma State College

O'Neill, Gordon  
Professor, English  
M.A., Georgia Southern College  
B.A., Georgia Southern College

Orr, Susan  
Disabled Student Advisor, SPARK  
A.S., Pima Community College

Palmer, Lillie M.
Dean, Business and Engineering Division  
Ed.D., East Texas State University  
M.Ed., University of Houston  
B.S., University of Houston

Parcelis, Res A  
Associate Dean, Science and Health  
Director of Athletics  
M.S., Ithaca College  
B.S., Cornell University  
A.A., Auburn Community College  
Parker, Rita,  
Chief HVAC Operator  
A.A.S., Texas State Technical Institute

Patrick, Peter  
Director, Financial Aid  
M.S., Tuskegee University  
B.S., Tuskegee University

Parsley, Rhonda  
Employment Training Coordinator  
JTPA  
B.A., University of Oklahoma

Patterson, Paula  
Administrative Assistant, Dean of Enrollment Management  
M.Ed., Texas Tech University  
B.S., Texas Tech University  
A.A., South Plains College

Peal, Juanita  
Physical Plant Worker

Peretz-Cernijo, Vicki  
Professor, Computer Science  
M.S., Corpus Christi State University  
B.A., University of Northern Iowa

Perkins, Toni  
Accounting Clerk, Bookstore

Perkus, Gerald H.  
Director, Institutional Research  
Ph.D., University of Rochester  
M.A., University of Rochester  
B.S., Brooklyn College

Phika, Rebecca  
Burster  
B.A., University of Texas at Austin

Phillips, Hazel  
Professor, Developmental Writing  
M.A., University of Chicago  
B.A., Dillard University

Pippin, Alan  
Reference Librarian  
M.L.S., University of North Texas  
B.A., University of North Texas

Porter, Beth M.  
Instructional Assistant, Mathematics  
M.S., Emory University  
B.S., University of North Texas

Powell, Annette  
Administrative Assistant  
Developmental Education

Powell, Eugene  
Director, Plant Operations  
B.S.M.E., Texas A&M University

Pfiffer, P. Douglas  
Professor, Mathematics  
M.S., West Texas State University  
B.S., West Texas State University  
A.S., Amarillo Jr. College

Rebel, Mary S.  
Dean of Students  
M.S., Drake University  
B.A., Central Michigan University

Ramshaw, Diana  
Professor, Office Administration  
M.S., North Texas State University  
B.S., Steven F. Austin State University

Ramey, J. Rex  
Coordinator, Art Lab  
M.A., George Peabody College  
B.S., Louisiana State University  
Baton Rouge

Reeves, Nancy  
Instructional Associate, ALC  
M.A., Southern Methodist University  
B.S., University of Texas at Austin

Rich, Nelson  
Professor, Biology  
M.S., Northeast Louisiana University  
B.S., Southeastern Oklahoma State University

Richardson, Judy P.  
Degree Plan Specialist  
A.S., Cedar Valley College

Richardson, Melba  
Secretary, Project SPARK  
B.A., University of North Texas  
B.S., Texas Tech University

Rodgers, J. Tom  
Assistant to the President  
Ph.D., George Peabody College for Teachers/Vanderbilt University  
M.S., East Texas State University  
B.S., University of Texas at Austin

Rogers, P. Dee  
Professor, Criminal Justice and Legal Assistant  
J.D., Southern Methodist University  
B.A., University of West Florida

Roman, Paula  
Coordinator of Cooperative Work Experience Retention & Articulation

Rosen, Karen  
Program Developer, Enterprise  
M.S., Central State University  
Edmond, Ok.

Royal, Martha  
Manager, Employment  
Classification and Compensation  
B.B.A., East Texas State University

Rubino, Edeline  
Professor, Developmental Reading  
M.Ed., The University of North Texas  
B.S., Cornell University

Rush, Teresa  
Receptionist, Enterprise

Rush, Wayne L.  
Assistant Director, Plant Operations  
B.B.A., Dallas Baptist University  
A.A., Portland Community College

Russell, Kimberly K.  
Director, Human Resources  
M.S., University of North Texas  
B.S., Baylor University

Ruta, Shirley  
Secretary, Computer Services

Sacerdote, Betty Jo  
Lab Assistant, Advertising Art  
A.A.S., Collin County Community College

Salisbury, Marjorie A.  
Division Secretary, Arts and Humanities

Sanchez, Judy  
Professor, Computer Science  
M.S., East Texas State University  
B.A., University of Texas, West Texas State University  
B.S., University of North Texas

Schmittau, Marilyn L.  
Administrative Assistant, Dean of Students

Schriver, Janet Ross  
Professor, Humanities  
M.A., University of Texas at Dallas  
B.A., University of Texas at Dallas

Schwartz, Harriet  
Dean, Social Sciences  
B.D., Vanderbilt University  
Ed.S., The College of William and Mary  
MA., Brandeis University  
B.A., City College of New York

Scott, Cherri M.  
Information Center Receptionist, SCC
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Education and Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott, Fritzeen</td>
<td>Manager, Purchasing</td>
<td></td>
</tr>
<tr>
<td>Scott, John David</td>
<td>Operator/Maintenance Technician</td>
<td></td>
</tr>
<tr>
<td>Seabolt, Janet S.</td>
<td>Physical Plant Worker.</td>
<td>CC</td>
</tr>
<tr>
<td>Searl, Steven</td>
<td>Periodicals Assistant</td>
<td></td>
</tr>
<tr>
<td>Shawn, Rkky</td>
<td>Future Shop Assistant</td>
<td></td>
</tr>
<tr>
<td>Slebman, C. Sue</td>
<td>Director, Bookstore</td>
<td></td>
</tr>
<tr>
<td>Sigona, James A.</td>
<td>Instructional Associate, HPED</td>
<td></td>
</tr>
<tr>
<td>Smith, Mitchell E.</td>
<td>Dean, Art and Humanities Division</td>
<td>M.A. Yale University  M.A. Columbia University  B.A. University of Texas at Austin</td>
</tr>
<tr>
<td>Smith, Mitchell E.</td>
<td>Accounts Payable Assistant</td>
<td></td>
</tr>
<tr>
<td>Sounjah, Susan</td>
<td>Receiving/Print Shop Clerk</td>
<td></td>
</tr>
<tr>
<td>Spears, Ronald</td>
<td>Director Law Enforcement</td>
<td>Academies  B.S.O.E. Wayland Baptist University  A.A.S. Frank Phillips Jr. College</td>
</tr>
<tr>
<td>Spector, Kathryn</td>
<td>Professor, Mathematics</td>
<td></td>
</tr>
<tr>
<td>Starnes, Kevin</td>
<td>Professor, Ornamental Horticulture &amp; Technology</td>
<td>B.S.E.D. Texas Tech  B.S. Texas Tech</td>
</tr>
<tr>
<td>Stephensen, Patsy</td>
<td>Employment Training Coordinator, JTPA</td>
<td>B.B.A. University of Texas at Austin</td>
</tr>
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<td>Thompson, Linda</td>
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<td>Tolleson, Martha F.</td>
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<td>M.A. University of North Texas  B.A. Sul Ross State University</td>
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<td>Vergas, Mario</td>
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<td>M.A., University of Texas at El Paso  B.A., University of Texas at El Paso</td>
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<td>Wropy, Rick</td>
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<tr>
<td>Yee, Vukl</td>
<td>Records Assistant, Human Resources</td>
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<td>Zerbe, Victoria</td>
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<td>Young, Estrella</td>
<td>Professor, Spanish</td>
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</table>
Academic Advising - Process in which students interact with academic and faculty advisors in decision-making, problem-solving, and long-range planning related to the student's academic goals.

Advanced Placement - Credit that may be earned through standardized tests offered through the high schools.

Advisor - A member of the college staff who will assist you with information about CCC and various academic programs.

Add - To enroll in another course after your original registration within the same time frame.

Articulation Agreement - After completing an associate degree at CCC, the entire degree will be used at a four-year institution to satisfy requirements for a bachelor's degree.

Assessment - A method to determine your preparation for college level course work.

Attempted Hours - The number of hours a student is enrolled in at CCC, including college-level and developmental coursework.

Audit - To take a credit course without receiving a grade or credit. (Plus a fee.)

Behavioral Science - A science examining human activities in an attempt to understand man's social behavior. Includes subjects such as Psychology and Sociology.

Blue Book - Paper used for essay tests available in the college Bookstore.

CAP - Customized Articulation Plan

Class Schedule - List of courses and sections for a specific semester, including names of instructor, day, hour and place of class meetings; and detailed registration procedures.

CLEP - College Level Examination Program is a series of standardized tests for college credit.

Concurrent Enrollment - The status of students who are enrolled in a CCC course while they are still classified as high school students, or simultaneously enrolled at CCC and a four-year institution.

Course - Refers to a common set of courses required for a degree.

Co-Requisite - Refers to two courses that must be taken simultaneously during the same semester.

Course Load - The number of semester hours for which a student enrolls in a given term.

Credit - Units assigned to each course.

Credit by Exam - Exams offered through the college that allow you to receive credit for specific courses.

Credit Hour - Varies by course, but generally refers to the number of hours you will spend in a specific course each week.

Curriculum - All the courses offered through the college.

Dean/Department - The administrative head of a division or department.

Degree Plan - The list of courses required for a specific degree usually outlined in the CCC Catalog.

Drop - Withdrawing from one or more courses while remaining enrolled in other courses in the college.

Earned Hours - The number of hours a student successfully completes including college-level, developmental, non-traditional and transfer work.

Electives - Credit that does not count toward a major, but which is required for a degree.

Fee - A charge for services that is added to the tuition.

Freshman - A student's classification until 30 credits are earned.

Full-Time - To be enrolled in 12 or more credit hours during the fall and spring, or six or more hours in the summer.

GPA/Grade Point Average - A calculation made each semester that summarizes grades and credit hours.

Grade Point - The value given to each letter grade to calculate the GPA. It is calculated by dividing the total number of grade points by the total number of semester hours attempted. The cumulative GPA is based upon work taken at CCC.

Grade Report - A report mailed to each student containing courses and grades for a particular semester.

Humanities - The branch of learning exploring human thought and relations.

Labs - A teaching component which occurs both inside and outside the classroom that enhances the learning experience.

Lab Sciences - Science courses utilizing scientific principles for experimentation and research.

Major - Your subject area of specialization.

Non-advanced Courses - Courses offered on the freshman and sophomore levels (100 and 200 series).

Non-Credit Course - A course for which no credit can be earned.

Orientation - A session held to acquaint you with areas located within the college.

Overload - Course load of more semester hours than students are normally permitted to schedule in a given period requiring approval of a college dean.

Part-Time - To be enrolled in less than 12 credit hours in the fall and spring semester or less than six hours in a summer session.

Prerequisite - Refers to a course which must be taken before you can enroll in a subsequent course.

Priority Registration - The first cycle of registration, which allows students to register well in advance of a semester.

Probation - A way to warn a student that his/her grades are below a certain standard. Probation may also be for disciplinary reasons.

Quality Hours - The number of college-level hours a student completes at CCC, excluding developmental, non-traditional and transfer work. These hours are used in calculating a student's CCC grade point average.

Records, Permanent - Cumulative record of students' courses, grades, credits, classification, address, social security number, etc.

Registration - Enrollment at the beginning of semester, including selection of classes and payment of fees and tuition.

Semester Hour - A unit of measurement of college work equivalent to one hour of class work. A 3-hour course is equivalent to three lecture hours per week.

Session - Courses that are offered with start and end times that vary from the "regular" semester. Typically, a session is shorter than a regular semester.

Sophomore - The classification used for students that have earned 30 credit hours or more.

Suspension - Dismissing a student whose grades have fallen below a certain standard. Suspension may also be for disciplinary reasons.

Syllabus - An outline, usually presented on the first day of class covering course topics, textbooks, required attendance, and grading policies.

Texas Academic Skills Program (TASP) - Testing program designed to ensure that all students attending public institutions of higher education in Texas have the reading, mathematics, and writing skills necessary to perform college level work.

Transcript - The official record of all course work at a particular institution.

Transfer Agreement - The majority of lower level requirements, including technical courses, can be satisfied at CCC before transferring to a four-year institution. The student follows the specific degree plan for each agreement.

Transfer Courses - Courses that should transfer to other colleges or universities.

Withdrawal - To withdraw from all courses enrolled in for a particular semester.
### Registration Worksheet

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<th>Course Call Number</th>
<th>Section</th>
<th>Title</th>
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### Alternative Worksheet

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### Scheduling Worksheet

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Collin County Community College
Application for Admission

(Please print)

Applying for (Check one):
\( \square \) Fall 19__
\( \square \) Spring 19__
\( \square \) Summer I 19__
\( \square \) Summer II 19__

**BIOGRAPHICAL DATA**

Name: ____________________________ Social Security Number: ____________

Local Address: ____________________________ Phone: (home) ____________________________ (work) ____________________________

City: ____________________________ County: ____________________________ State: ____________________________ Zip: ____________________________

Have you lived at this address the past 12 months or longer? Yes ____________ No ____________

If not, list residence for past 12 months: ____________________________

Date of Birth ____________________________ Place of Birth ____________________________

Are you a U.S. Citizen? Yes ____________ No ____________ If no, do you have Permanent Resident status? Yes ____________ A#: ____________ No ____________

If no, State country of citizenship: ____________________________

Type of Visa: ____________________________ Date: ____________________________

Ethnic Origin: 1. White Non-Hispanic ____________________________ 3. Hispanic ____________________________ 5. American Indian or Alaskan Native ____________________________

2. Black Non-Hispanic ____________________________ 4. Asian/Pacific Islander ____________________________ 6. Not a U.S. Citizen or Permanent Resident ____________________________

Are you a member of the U.S. Armed Forces? Yes ____________ No ____________ Are you receiving, or eligible to receive, veteran's benefits? Yes ____________ No ____________

**EDUCATIONAL DATA**

Major Field of Study/Interest (see reverse) ____________________________

Last high school attended: ____________________________ City: ____________________________ State: ____________________________

Date of graduation: ____________________________ If you did not graduate, do you have a GED? Yes ____________ No ____________

If yes, date GED received: ____________________________

**LIST ALL PREVIOUS COLLEGES ATTENDED** (Official transcripts required.)

<table>
<thead>
<tr>
<th>College</th>
<th>City/State</th>
<th>Dates Attended</th>
<th>Credits Earned</th>
<th>Degrees Received</th>
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</table>

Are you currently on academic or disciplinary suspension? Yes ____________ No ____________ If yes, state name of school: ____________________________

Are you currently on academic or disciplinary probation? Yes ____________ No ____________ If yes, state name of school: ____________________________

**IN CASE OF EMERGENCY, PLEASE CONTACT:**

Name: ____________________________ Relationship: ____________________________

Address: ____________________________ Phone: (home) ____________________________ (work) ____________________________

I certify that the information given on this application is complete and accurate:

**SIGNATURE** ____________________________ DATE ____________________________

**OATH OF RESIDENCY**

For those claiming Texas residency only:

I understand the requirements for classification as a resident of Texas for tuition purposes and I affirm by my signature below that to the best of my knowledge and belief I am eligible to be so classified. I also affirm that I will notify the proper officials of this institution if circumstances change so as to disqualify me for this classification. I understand that violation of this oath of residency will result in disciplinary action.

NOTE: Documentation of Texas residency is required. See reverse for details.

**SIGNATURE** ____________________________ DATE ____________________________

RETURN TO: Collin County Community College Admissions Office

Central Campus
2200 W. University Dr., Room A108
McKinney, Texas 75069
(214) 548-6710

Spring Creek Campus
2800 E. Spring Creek Pkwy., Room G103
Plano, Texas 75074
(214) 881-5710

CCCC does not discriminate on the basis of race, color, religion, sex, national origin, age, handicap or veteran status.
Major Fields of Study List

Arts and Humanities

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<td>Photography</td>
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<td>Spanish</td>
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<td>Speech Communication</td>
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Business and Engineering

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Social Sciences

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AA = Associate of Arts degree
AS = Associate of Science degree
AAS = Associate of Applied Science degree
CER = Certificate program

County Code List

Collin 043 Cooke 049 Dallas 057 Denton 061 Fannin 074
Grayson 091 Hunt 116 Rockwall 199 Tarrant 220

Residency Information

In order to be eligible for Texas residency, you **must** have lived in Texas for 12 months prior to registration. The State of Texas requires colleges and universities to verify residency for students claiming Texas residency for tuition purposes. A copy of one of the following **must** be sent to the Admissions Office or presented at the time of application in order to determine the correct residency classification:

- Texas Driver's License • at least one year old, or valid renewal license.
- Texas High School Transcript • if you were enrolled in high school within the last 12 months.
- Texas College or University Transcript • verifying Texas residency during the last 12 months.
- Employment Verification • indicating employment in Texas for at least 12 months.
- Texas Voter Registration Form • at least one year old.
- Lease Agreement • covering the 12 months preceding registration.

Contact the Admissions Office if you do not have any of the above and are planning to claim Texas residency.

Collin County Property Owners

If you have not lived in Texas for 12 months but you do own property in Collin County, you are eligible for a tuition waiver. A copy of your deed is **required** for verification. (Property owners on most types of temporary visas are generally not eligible for the ad valorem waiver.) Dependents of Collin County property owners requesting an ad valorem waiver must also submit the top portion of the federal income tax form from the current and preceding tax reports.

For Office Use

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<th>Documentation</th>
<th>Number</th>
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Revised 7/91