All blank pages have been removed from this document.
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This publication prepared by the Dallas County Community College District Office of Public Information of the Office of Planning and Development Affairs.

Educational opportunities are offered by the Dallas County Community College District without regard to race, color, age, national origin, religion, sex or disability.
As a result of State law, ALL students entering any Texas public college Fall 1998, or thereafter, must have either TASP, QuickTASP or state approved Alternate Assessment test scores on file prior to enrolling for college-level courses. Deaf students entering Fall 1995, or thereafter, are subject to all TASP regulations with the exception that they must take the Stanford Achievement Test rather than TASP, QuickTASP or Alternate Assessment.

1. What is TASP and who must take it? TASP is both a test and a program to ensure Texas college students have the academic skills to be successful in college. All students, unless otherwise exempt or waived, must participate in the TASP program.

2. Who is exempt or waived from TASP requirements? There are a number of exemptions and waivers. For a complete list, see the section entitled “TASP” within this catalog.

3. How can the TASP requirements be met? Students may meet the TASP requirements in several ways: (1) Pass all sections of TASP or QuickTASP; (2) Pass all sections of the state approved DCCCD Alternate Assessment on the initial attempt; (3) In the exact following order, take and fail a section of TASP or QuickTASP, complete all required developmental coursework with a grade of C or better, retake and fail the same section of TASP or QuickTASP, and then take and make a B or better in an approved, related college-level course; or (4) In the exact following order, take and fail a section of the DCCCD Alternate Assessment, complete all required developmental coursework with a grade of C or better, retest with TASP or QuickTASP and fail the same subject area that was originally failed on the DCCCD Alternate Assessment, and then take and make a grade of B or better in an approved, related college-level course. Students attempting to meet the requirements through the third or fourth methods must check with the college TASP Coordinator to learn of all required steps to be met.

4. What happens if a student fails a section of TASP, QuickTASP or Alternate Assessment? Students who fail either a section of the TASP, QuickTASP, or the DCCCD Alternate Assessment test must enroll and actively participate in developmental courses related to the failed area(s) or be dropped from college-level courses. (Concurrently enrolled high school students who take and fail a section of TASP, QuickTASP or DCCCD Alternate Assessment will not be required to take developmental courses as long as they are in high school.) Students must continue to participate in mandated developmental coursework until (1) they pass the failed section of TASP or QuickTASP (please note that the DCCCD Alternate Assessment tests cannot be used for retesting purposes), or (2) they have completed the required developmental coursework at which time the college may release the student from further developmental courses.

5. How are the tests administered? The DCCCD Alternate Assessment and QuickTASP are offered at each DCCCD Assessment/Testing Center throughout the year during various dates and times. Please contact your DCCCD campus Assessment/Testing Center for specific information regarding DCCCD Alternate Assessment and QuickTASP test administration procedures. The TASP test is administered statewide at least six times a year. Students MUST register on forms available in the college Assessment/Testing Center in order to take the TASP test. The on-time registration fee for TASP and QuickTASP is $29. A TASP study guide is available for purchase.

6. When must all TASP requirements be met? Students must meet all TASP requirements prior to receiving a certificate (if TASP is required) or degree OR before taking junior/senior courses at a Texas public university.

7. Will other institutions have my DCCCD Alternate Assessment scores? TASP, QuickTASP, and Alternate Assessment scores will be printed on an official Texas public college or university transcript. DCCCD students who take the DCCCD Alternate Assessment and later transfer to another Texas public college or university will have their scores honored by the receiving institution. Transfer students from another Texas public college or university to the DCCCD will have their state-approved alternate assessment scores honored by the DCCCD.

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<tr>
<td>Cedar Valley College</td>
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<td>Eastfield College</td>
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<td>Richland College</td>
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<tr>
<td>District Office</td>
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It is the student's responsibility to be aware of ALL TASP requirements and to meet them. TASP rules are always subject to change.

Additional TASP information can be found at The Texas Higher Education Coordinating Board's website: WWW.thecb.state.tx.us/
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Fall Semester, 2000

Note: Students should register as early as possible. By registering early, students may take full advantage of academic advisement and may have more course options available. Fall registration begins June 13, 2000.

August 21 (M) Faculty Reports
August 28 (M) Classes Begin
September 4 (M) Labor Day Holiday
September 11 (M) 12th Class Day
September 16 (S) TASP Test Administered
November 11 (S) TASP Test Administered
November 16 (R) Last Day to Withdraw with a Grade of "W"
November 23 (R) Thanksgiving Holidays Begin
November 27 (M) Classes Resume
December 11-14 Final Exams
(M-R)
December 14 (R) Semester Closes
December 18 (M) Grades due in Registrar’s office by 10am
December 22 (F) College Buildings and Offices Close for the Holidays at end of workday

Winter Term, 2000/2001

Contact Colleges for availability and schedules.

Spring Semester, 2001

Note: Students should register as early as possible. By registering early, students may take full advantage of academic advisement and may have more course options available.

Check the colleges for registration times.

January 2 (T) College Buildings and Offices Open
January 8 (M) Faculty Reports
January 15 (M) Martin Luther King, Jr. Day Holiday
January 16 (T) Classes Begin
January 29 (M) 12th Class Day
March 1 (R) Dist. Conference Day, Faculty & Admin.
March 2 (F) Faculty Professional Devel. (TCCTA)
March 3 (S) TASP Test Administered
March 12 (M) Spring Break Begins
March 15 (R) District Conference Day, Prof. Sup. Staff
March 16 (F) Spring Holiday for All Employees

Spring Semester, 2001 (cont’d)

March 19 (M) Classes Resume
April 12 (R) Last Day to Withdraw with a Grade of "W"
April 13 (F) Holidays Begin
April 16 (M) Classes Resume
April 28 (S) TASP Test Administered
May 7-10 (M-R) Final Exams
May 10 (R) Semester Closes
May 10 (R) Graduation
May 14 (M) Grades due in Registrar’s office by 10 am

May Term, 2001

Contact Colleges for availability and schedules.

Summer Sessions, 2001

Note: Students should register as early as possible. By registering early, students may take full advantage of academic advisement and may have more course options available.

Check the colleges for registration times.

First Summer Session:

(Based on 4 day class week plus 1st and 2nd Friday)

May 28 (M) Memorial Day Holiday
June 4 (M) Classes Begin
June 7 (R) 4th Class Day
June 8 (F) Class Day (1st Friday class meeting)
June 15 (F) Class Day (2nd Friday class meeting)
June 16 (S) TASP Test Administered
June 21 (R) Last Day to Withdraw with a Grade of "W"
July 3 (T) Final Exams
July 3 (T) Semester Closes
July 4 (W) Fourth of July Holiday
July 6 (F) Grades due in Registrar’s Office by 10am

Second Summer Session:

(Based on 4 day class week - No Fridays)

July 11 (W) Classes Begin
July 14 (S) 4th Class Day
July 28 (S) TASP Test Administered
August 2 (R) Last Day to Withdraw with a Grade of "W"
August 14 (T) Final Exams
August 14 (T) Semester Closes
August 16 (R) Grades due in Registrar’s office by 10 am

Mini-semesters, flexible-entry classes, and other alternative schedules may be offered between or during regular semester by some of the Dallas County Community Colleges. Please contact individual college schedules for availability.
Dallas County Community College District
Board of Trustees

Kitty Boyle
Chair

Carla McGee
Vice Chair

Charletta Compton

Diana Flores

Randy Leake

Pattie T. Powell

Jerry Prater

J. William Wenrich
Chancellor

Dallas County Community College District Administrators

Chancellor .......................................................... J. William Wenrich
Vice Chancellor of Business Affairs .................................. Bob Brown
Vice Chancellor of Educational Affairs ................................ Robert Aguero
Vice Chancellor of Planning and Development Affairs .............. Bill Tucker
Executive Assistant to the Chancellor .................................. Barbara K. Corvey
Assistant Chancellor, Educational Telecommunications ............. Pamela K. Quinn
Associate Vice Chancellor of Business Affairs ......................... Brian Gutierrez
District Director of Development/Executive Vice President, DCCCD Foundation, Inc. ............. Betheny Reid
Legal Counsel ......................................................... Robert Young
Executive Director, Educational Partnerships .......................... Corina Gardea
Executive Director, Academic and Student Programs ................. Richard McCrary
Director of Computer Services ........................................ Joe Ward
Director of Facilities Management and Planning ........................ Clyde Porter
Director of Human Resources ........................................... Susan Hall
Director of Internal Audit ............................................. Rafael Godinez
Director of Planning and Organizational Development .......... Vacant
Director of Process Support Services ..................................... Kathryn Tucker
Director of Public Information ........................................... Claudia Robinson
Director of Purchasing .................................................. Phillip Todd
Director of Resource Development ...................................... Lyndon McClure
Director of Technical Services .......................................... Paul Dumont
I. GENERAL INFORMATION

History of the Dallas County Community College District

The Dallas County Community College District is comprised of seven colleges located strategically throughout Dallas County. Together the colleges enroll approximately 50,000 credit and 45,000 non-credit students per long semester and employ over 2,000 full-time faculty and staff members.

The growth of the District into an educational system such as this was not by chance. In May, 1965 voters created the Dallas County Junior College District and approved a $41.5 million bond issue to finance it. The next year the District's first college, EI Centro, began operation in downtown Dallas. Eastfield and Mountain View Colleges enrolled their first students in 1970, and the plans for a multi-campus district became a reality. Richland College became the District's fourth college in 1972.

The voters of Dallas County approved the sale of an additional $85 million in bonds in September, 1972. This step provided for expansion of the four existing colleges and the construction of three more colleges. A key part of the expansion program was the remodeling and enlarging of EI Centro College, a project completed in 1979. Construction of new facilities resulted in the opening of Cedar Valley College and North Lake College in 1977. Brookhaven College, the final campus in the seven college master plan, opened in 1978.

In 1989, the Bill J. Priest Institute for Economic Development opened south of downtown Dallas. Named for the DCCCD's founding chancellor, the BJPIED serves the community through the Business and Professional Institute, Edmund J. Kahn Job Training Center, Small Business Development Center, Center for Government Contracting, Business Incubation Center and International Trade Resource Center.

Mission of the Dallas County Community College District

The mission of the DCCCD is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for development of intellectual skills, job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve.

District Philosophy and Goals

Since 1972, the District has been known as the Dallas County Community College District. The name shows that the District has outgrown the term "junior college." The name also reflects the District's philosophy. The colleges truly are community institutions, meeting the varied educational needs of the growing Dallas County region. The primary goal of the District and its colleges is to help students of all ages achieve effective living and responsible citizenship in a fast-changing region, state, nation and world. Each college is therefore committed to providing a broad range of educational programs for the people it serves.

The needs, abilities and goals of each student are considered important. The focus is on creating an educational program for the individual rather than squeezing or stretching the individual to fit an "educational mold."

The Dallas County Community Colleges and the Bill J. Priest Institute for Economic Development are teaching, learning, community-building institutions. To fulfill the public trust the DCCCD:

• offers a student guarantee to the institutions and employers receiving its graduates;
• measures its collective and individual behaviors against a code of ethics and a statement of organizational values;
• makes decisions through a line organizational structure which receives input from those most affected by the decisions;
• strives to provide its services with revenues of
  - no more than 20% from student tuition
  - no more than 30% from local taxes; and
  - a minimum of 50% from the State;
• seeks to maintain the highest possible credit ratings;
• views itself as a team player in the local community of educators, business people, elected officials and other community leaders; and
• sees its role as a weaver of a seamless fabric of educational opportunity for the people of Dallas County.

As a major employer, the DCCCD: follows open search procedures which solicit the best available candidates for positions and which will provide a balanced workforce which reflects the ethnic composition of the adult workforce in Dallas County;
• involves those most directly affected by hiring decisions in the candidate review process; and
• seeks to assure that competent performers do not lose real compensation through inflation.

In its organizational culture, the DCCCD:

• places ultimate value on student success;
• applies the principles of continuous quality improvement to achieve student success; and
• uses technology not only to teach distant learners, but also to educate, train and retool both its students and its employees.

How do the colleges meet the educational needs of such a varied family? The answer is found in four categories of programs:
1. For the student working toward a bachelor's or higher degree, the colleges offer a wide range of first-year and second-year courses which transfer to senior colleges and universities.

2. For the student seeking a meaningful job, the colleges offer one-year and two-year programs in technical and occupational fields.

3. For the employed person wishing to improve job skills or to move into a new job, the colleges offer credit and non-credit adult educational courses.

4. For the person who simply wants to make life a little more interesting, the colleges offer continuing education programs on cultural, civic and other topics.

Additional programs are available for the high school student, dropouts and others with special needs. The colleges help each student design the educational program that best meets individual needs. Every student is offered advisement to define goals and identify abilities. Continued guidance is available throughout the student's college career in case goals and plans change. This emphasis on advisement, rare for some institutions, is routine at all District colleges.

**District Responsibilities**

To carry out the District philosophy, the colleges obviously must offer a wide range of programs and courses, including guidance services. These programs and courses must help each individual attain a high level of technical competence and a high level of cultural, intellectual and social development. In addition, high professional standards for the academic staff must be maintained within a framework prescribed by the Board of Trustees. At the same time, the program and organization of each college must make maximum use of faculty and facilities.

The colleges have a basic responsibility to provide educational and cultural leadership to the community. They must be sensitive to changing community needs and adapt readily to those needs. Individuals capable of continuing their educational development should be given the opportunity to improve their skills. Finally, to continue to meet its responsibilities in changing times, the college system must guard against stagnation. Creativity and flexibility are therefore fostered at the District level and at each college.

**League for Innovation**

The Dallas County Community College District is a member of the League for Innovation in the Community College. The League is composed of 19 outstanding community college districts throughout the nation. Its purpose is to encourage innovative experimentation and the continuing development of the community college movement in America. Membership commits the District to research, evaluation and cooperation with other community college districts. The goal is to serve the community with the best educational program and the fullest use of resources.

**Equal Educational And Employment Opportunity Policy**

The Dallas County Community College District is committed to providing equal educational and employment opportunity regardless of sex, race, color, religion, age, national origin or disability. The District provides equal opportunity in accord with federal and state laws. Equal educational opportunity includes admission recruitment, extra-curricular programs and activities, access to course offerings, counseling and testing, financial aid, employment, health and insurance services and athletics. Existing administrative procedures of the College are used to handle student grievances. When a student believes a condition of the College is unfair or discriminatory, the student can appeal to the administrator in charge of that area. Appeals to a higher administrative authority are considered on the merits of the case.

**Family Educational Rights and Privacy Act Of 1974**

In compliance with the Family Educational Rights and Privacy Act of 1974, the College may release information classified as "directory information" to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone number, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports (7) dates of attendance, (8) educational institution most recently attended and (9) other similar information, including major field of study and degrees and awards received.

A student may request that all or any part of the directory information be withheld from the public by giving written notice to the Registrar's Office during the first 12 class days of a fall or spring semester or the first four class days of a summer session. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged; all requests must be made in person. No transcript or academic record is released without written consent from the student, except as specified by law.

**Student Consumer Information Services**

Pursuant to the Educational Amendment of 1980, Public Law 96-374, the College provides all students with information about its academic programs and financial aid available to students.

**Standard Of Conduct**

The college student is considered a responsible adult. The student's enrollment indicates acceptance of the standards of conduct published in this catalog.

If students are unable to complete the course (or courses) for which they have registered, it is their responsibility to withdraw formally from the course (or courses) for which they have registered. Failure to do so will result in their receiving a performance grade, usually an "F."
Accreditation
Details and procedures relating to the review of accreditation, approval, and various licensing documents are available through the administrative offices located on each campus.

II. IMPORTANT TERMS AND ABBREVIATIONS

Academic advisor: A member of the college staff who helps students set educational goals and select courses to meet those goals.

Add: During any single semester, to enroll in additional course(s) after registration.

Admission: A person wishing to enroll must complete an application, be accepted and receive acknowledgement of acceptance from the Admissions Office before registering.

Audit: Enrollment in a credit course without receiving academic credit.

Catalog: The book containing course descriptions, certificate and associate degree requirements, and general information.

Class schedule: A booklet which is published prior to each semester listing classes, sections, dates, times, instructors' names and meeting places. This booklet is used by students in preparing personal class schedules each semester.

Common Course Numbers: Beginning in the Fall of 1995, the Common Course Number became the official number of the course. This same Common Course Number is being used for the same course by a number of colleges throughout Texas to help students identify how a course will transfer. However, the lack of a Common Course Number does not necessarily mean a course will not transfer.

Concurrent enrollment: (a) Enrollment by the same student in two different DCCCD colleges at the same time; (b) Enrollment by a high school student in one of the DCCCD colleges while still enrolled in high school; (c) Enrollment by a student in two courses in the same semester; (d) Enrollment in both a DCCCD institution and another college at the same time; (e) Enrollment in both credit and Continuing Education courses at the same time.

Core: The 48 prescribed hours of a 61 hour degree plan in which a student must successfully complete in order to receive an Associate in Arts / Associate in Sciences Degree.

Course Load: The number of hours or courses in which a student is enrolled in any given semester.

Credit: The numerical value assigned to a course (see "CREDIT HOURS/SEMESTER HOURS").

Credit hours/semester hours: The unit of credit earned for course work. Each college course is worth a certain number of credit or semester hours. This number is determined by the type of class and the number of hours per week it meets.

For example, a 3-credit hour class (English, history, etc.) meets 3 hours per week during the fall/spring semester; a 4-credit-hour class (science, languages, etc.) meets 6 hours per week. Check the catalog or the current class schedule for the value of any course you wish to take.

Credit/non-credit: Credit classes are those which award academic credit and may apply toward a degree. Non-credit classes do not apply toward a degree and are usually offered through Continuing Education.

DCCCD: Dallas County Community College District comprised of Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland Colleges, plus the Bill J. Priest Institute for Economic Development and The LeCroy Center.

Developmental Studies Courses: Courses which develop prerequisite skills in reading, writing and mathematics. Because of the nature of these courses, the credit earned will not count toward graduation requirements and may not be transferred to colleges outside the DCCCD.

Distance Learning: Classes which are delivered to students through television, the Internet, or other types of technology.

Drop: The act of officially withdrawing from a particular course without penalty before a specified date. See the calendar at the first part of this catalog for "Last Day to Withdraw." It is the student's responsibility to drop a course by the date published.

Dual credit: Credit earned for both high school and college via concurrently enrolled high school students.

Electives: Courses which do not count toward a major but are required for most college degrees. Electives are selected for personal interest, skill development, or to increase one's knowledge or understanding. Consult with an advisor before deciding upon electives.

Fee: A charge, in addition to tuition charges, which the college requires for services.

Flexible-entry course: A course beginning and ending on dates which are different from the regular semester. This is also referred to as "flex-entry" or "short semester." Consult the class schedule for further information.

Former student: One who has not attended a DCCCD college in the past year.

Full-time student: A student who is enrolled for at least 12 credit hours during a semester or for 6 credit hours during a summer session. The student may be enrolled in one or more DCCCD colleges as long as the total number of hours meets the full-time requirement.

GPA: Grade Point Average. Two different ways of computing a GPA are utilized. For further explanation, see catalog section entitled "Scholastic Standards."

Grade points: See catalog section entitled "Scholastic Standards."

Grades: See catalog section entitled "Scholastic Standards."
Lab hours: The number of hours a student spends each week in a laboratory or other learning environment.

Lecture hours: The number of hours a student spends each week in a classroom other than a laboratory.

Major: The subject or field of study in which the student plans to specialize. For example, one “majors” in Automotive Technology, Business, etc..

Part-time student: A student who is enrolled for less than 12 credit hours during a semester or less than 6 credit hours in a summer session. The student may be enrolled in one or more DCCCD colleges as long as the total number of hours meets the part-time requirement.

Performance grade: A grade of A, B, C, D or F. This does not include the grades of W, I, E or WX. See catalog section on “Academic Information” for more on grades and grade point averages.

Prerequisite: A requirement which must be met BEFORE enrolling for a specified course. For example, the prerequisite for English 1302 is the successful completion of English 1301. A prerequisite may be another course (high school or college), an appropriate assessment score, or permission of the instructor.

Probation: A warning for a student whose academic work or behavior is unsatisfactory. Students on academic probation may be suspended if their academic performance does not improve.

Registration: The official process for enrolling in courses. This involves selecting classes with the help of an advisor, completing all registration forms and paying fees. Check the class schedules for registration dates.

Registration Number: A number indicating the course, day/evening, hour, room number and name of instructor for a particular course.

Semester: A term denoting the length of time a student is enrolled in a specific course. For example, there are two long semesters (Fall and Spring) which last approximately 16 weeks. There are two summer sessions or “semesters” (Summer I and Summer II) which last approximately 12 weeks.

Skills for Living: Skills needed for living well with oneself, others and changing environments. Skills for Living are discussed and learned throughout the curriculum.

TASP: Texas Academic Skills Program; see special section in this catalog about this testing program.

Technical/occupational courses: Courses which lead to a certificate of Associate in Applied Science Degree in a technical or occupational program. These courses are designed to aid the student in developing entry-level skills to be utilized in the job market. Consult an advisor regarding transferability if you plan to attend a four-year institution.

Tech-Prep: An educational process where the DCCC and the public high school districts cooperatively develop and implement a planned sequence of course work to prepare students for technologically advanced careers. Tech Prep programs are endorsed and approved by The Texas Education Agency (TEA) and The Texas Higher Education Coordinating Board (THECB): Through the Tech Prep process students earn college credit while in high school and advance to college programs after graduation.

Telecourses: Courses providing flexibility and convenience for students seeking college credit with minimum campus visits. Students watch the course television programs at home on regular broadcasts or cablecasts, complete the study guide and reading assignments, take tests on campus and attend optional discussion meetings. Instructors are available during regular office hours or via telephone when assistance is needed.

Transfer courses: Courses which are designed to transfer to other colleges and universities. Students need to consult with an advisor or counselor about the transferability of specific courses. Because a course will transfer does not mean it will apply toward a specific major or degree at a four-year college or university.

Transcript: An official copy of a student's academic record which can be obtained through the Admissions Office. An official transcript must have the seal of the college affixed and the signature of the Registrar.

Withdrawal: The act of ending enrollment in classes. A student withdrawing must go through a formal procedure. It is the student's responsibility to withdraw officially by the appropriate date. See the calendar in this catalog or the class schedule for the “Last Day to Withdraw.”

III. ADMISSIONS AND REGISTRATION

General Admissions Policy

The College has an “open door” admissions policy. It ensures that all persons who can profit from post-secondary education have an opportunity to enroll. Unless an admitted student is TASP exempt, prospective students must present TASP (Texas Academic Skills Program) scores or take the DCCCD alternate assessment tests. Assessment is not used to determine admission except for students wishing to enroll in “special admissions” programs.

Admission Requirements

Documentary evidence of Texas residency must be provided by all applicants claiming Texas residence and requesting resident tuition classification. This evidence must be submitted with the application for admission and must prove twelve (12) months of Texas residency immediately prior to the semester of enrollment. Failure to provide evidence will result in an applicant being classified as a non-resident for tuition/fee purposes. Contact the Admissions Office for specific information detailing required documentation.

It is recommended, although not required, that all prospective students have adequate immunization for diphtheria, rubella, rubella, mumps, tetanus and
poliomyelitis. Health-related programs may require specific immunizations prior to admission. Information is provided at orientation sessions for health-related programs.

**Beginning Freshmen**

Students enrolling in college for the first time who fit one of the following categories may apply for admission:

A. Graduates from accredited high school;
B. Graduates of an unaccredited high school who are 18 years of age or older;
C. Those who have earned a General Education Diploma (G.E.D.);
D. Those who are at least 18 years of age and who do not have a diploma or G.E.D. may be admitted by individual approval;
E. Those who are under the age of 18, are no longer enrolled in high school of any kind, and who do not have a diploma nor a G.E.D. may be admitted by individual approval;
F. Those who are under the age of 18, did not graduate from an accredited school, but who graduated from a non-accredited high school, or were schooled in a non-traditional setting (i.e., home-schooled) may be admitted by meeting all of the following conditions:

1. Written recommendation of the principal or superintendent of the last high school attended, or
2. On the basis of completion of the college's assessment program or TASP with the results indicating the student has the ability to benefit from the college's curricular offerings.

G. Admitted students must present TASP scores or take the alternate assessment program prior to registration.

**Students Concurrently Enrolled in High School and the DCCCD**

Students still enrolled in high school may be admitted under the following conditions:

A. Students who have completed their junior year in an accredited high school may be admitted upon the written recommendation of the high school principal and must present scores on TASP or the college assessment program with results indicating the ability to complete college-level work. Such students may take no more than two courses each semester.

B. Students who have not completed their junior year at an accredited high school may be admitted upon meeting all the following conditions:

1. The written recommendation of the high school principal;
2. Presentation of scores on the TASP or college assessment program which indicate the student has the ability to complete college-level work;
3. Approval of the Vice President of Instruction or designate. Such students may take no more than two courses each semester. However, students meeting specific conditions may be permitted to enroll for three courses.

C. Students who are enrolled in non-accredited high schools or schooled in a non-traditional setting (i.e., home-schooled) and who have completed the equivalent of the junior year (16 units) in high school may be admitted by meeting all the following conditions:

1. Provide a notarized record of the school subjects completed (consistent with the Texas Education Agency minimum requirements);
2. Presentation of scores on TASP or college assessment program with results indicating the ability to do college-level work;
3. Agree to limitations on conditions of admission. Students may take no more than two courses each semester. However, students meeting specific conditions may be permitted to enroll for three courses.
4. Approval of the Vice President of Instruction or designate.

D. Students who are enrolled in non-accredited high schools or schooled in a non-traditional setting (i.e., home-schooled) and have not completed the equivalent of the junior year (16 units) in high school may be admitted by meeting all the following conditions:

1. Provide a notarized record of the school subjects completed (consistent with the Texas Education Agency minimum requirements);
2. Presentation of scores on the TASP or college assessment program with results indicating the ability to do college-level work;
3. Agree to limitations on conditions of admission. Students may take no more than two courses each semester; and
4. Approval of the Vice President of Instruction or designate.

E. High school students may enroll in remedial courses only if a contract for such services exists between the colleges and the school.

**High School Students Enrolled in Dual Credit Programs**

Dual Credit Programs are instructional partnerships approved by the governing boards or designated authorities of both the public school district or private secondary school and the DCCCD where instructional concurrent course credit is provided to high school students for the awarding of both high school and college certificate and associate degree credit.

**Student eligibility requirements:**

1. To enroll in courses of an associate degree or level two certificate (TASP eligible) program, the high school student must present a passing score on TASP or the
approved alternate assessment in at least one area (reading, writing, or math) as deemed applicable by the college for the intended course in which the student wishes to enroll. Students who are exempt from TASP are also exempt from local assessment for purposes of dual course credit.

(2) All sections of TAAS must have been passed by students wishing to enroll in dual credit classes.

(3) Students in private or home-schools must meet #1 above.

(4) High school students are generally limited to enrollment in two dual credit courses per semester. Such students may be permitted to enroll in more than two courses if recommended to do so by the high school principal AND under one of the following conditions:
   (a) Achieve a minimum GPA of 3.00 on at least two college courses taken in previous semesters; or
   (b) Proof of having passed all sections of TASP or alternate assessment; or
   (c) Proof of eligibility to be TASP exempt based upon TASP scores or alternate assessment scores. (Note: these scores are altered by the THECB and the currently approved scores must be utilized.)

(5) High school students must meet all appropriate admissions criteria to the college.

(6) High school students must fulfill all prerequisite requirements to enrolling in a dual credit course.

Transfer Students
An applicant is eligible for admission for enrollment from an accredited collegiate institution as defined in the "Transfer of Credit" section of the catalog and must meet the following conditions:

A. Present a complete transcript bearing impression of seal and signature of college/university official of each institution attended. Transcripts must be submitted before enrollment of the semester in which the student first enrolls and should include the previous admission record and evidence of honorable dismissal. Students not submitting transcripts prior to enrollment can be blocked from a number of courses which require taking certain prerequisites. Transcripts received become the permanent property of the college. Recipients of baccalaureate and/or graduate degrees from accredited colleges and universities may submit a copy of a college/university diploma in lieu of transcripts. A student transferring from another collegiate institution is not at liberty to disregard his/her collegiate record by applying as a beginning student. The college reserves the right to review academic credentials and/or transcripts from other higher education institutions for purposes of evaluating the acceptability of credits. An applicant who fails to report all accredited college/university course work will be subject to disciplinary action (including expulsion) and possible loss of credit for subsequent course work taken at the college.

B. Meet the minimum academic standards of the college. If an applicant on enforced scholastic withdrawal or suspension from another institution meets the minimum academic standards of the college, the applicant may petition for admission to the Admissions Committee of the college. Admission may be provisional and enrollment may be limited as to credit hours and course work.

C. After being admitted, meet all TASP requirements as shown below.
   (1) Transfers from other Texas public college/universities and who are not TASP exempt must present TASP scores or scores for the alternate assessment program if they wish to enroll in any college-level coursework; and
   (2) Transfers from private and/or out-of-state colleges/universities who are not TASP exempt, must present TASP scores or alternate assessment scores.

Former Students
Students formerly enrolled in the Dallas County Community College District who have not attended a DCCCD college for more than one year must update their application for admission to any District college. Students with unsettled financial debts or whose record is blocked for any other reason at any District college will not be allowed to register until the record is cleared.

Academic Forgiveness Policy
In keeping with SB1321 passed into legislation in 1993, any state resident may elect not to have the college utilize college credits on courses which are ten (10) years or older. Should the student elect this option, no college courses or credits ten (10) years or older will be evaluated for credit. Students may not selectively choose courses ten (10) years or older to be utilized. This provision does not relieve students from notifying the college of attendance at previous institutions nor of the need to submit transcripts indicating all previous course work attempted. Students electing this option must notify the Office of the Registrar prior to enrollment. This Academic Forgiveness Policy does not apply toward eligibility issues for federal financial aid.

International Students
The College is authorized under federal law to enroll non-immigrant students carrying valid visas. International students are admitted once all admission requirements are complete. All International Students seeking F-1 visa status must:

1. Contact the institution to request international student admission information;
2. Provide official TOEFL (Test of English as a Foreign Language) score of 530 or higher on the paper/pencil version or TOEFL score of 197 or higher on the computerized version to meet the English proficiency requirement and be considered for academic credit. Students who meet one of the following criteria will be excused from the TOEFL requirement:
   A. A graduate of accredited U.S. college or university;
   B. A native speaker of English from a country in which English is the primary language of the majority as
documented by the Cambridge Encyclopedia of Languages. (See international admissions advisor for list of approved countries.)

C. An institutional TOEFL score of 550 or higher on the paper/pencil version or TOEFL score of 197 or higher on the computerized version from the University of North Texas or the University of Texas at Arlington may be substituted for the TOEFL;

D. Prospective students who document completion of the final level of an Intensive English Language Program which is approved by the DCCCD through an established agreement. Upon admission, all international students are required to complete DCCCD assessment for academic advisement and placement. If adequate English proficiency is not demonstrated through this assessment, placement in additional English language courses will be required.

3. Show documented evidence of sufficient financial support for the academic year;

4. Enroll in the DCCCD F-1 International Student Medical Benefits Plan or provide documentation of adequate health insurance coverage approved by the international admissions advisor. Insurance benefits must cover the duration of study at the institution. International students who do not maintain required insurance may be withdrawn from college.

5. Provide written proof of negative tuberculin skin test or chest X-ray, diphtheria/tetanus immunizations taken within the last ten years, measles and rubella vaccines taken since January 1, 1968, and polio immunization if the student is under nineteen years of age;

6. Submit official transcripts from each college or university previously attended with a minimum of "C" average;

7. Fulfill all admission requirements before the deadline designated by the College for international students and receive approval for admission from international admissions advisor.

Upon admission, students must present all original immigration documents including a valid visa (I-94 arrival/departure record) and unexpired passport to be copied and kept on file.

F-1 students must receive and secure the Form I-20AB from each new school attended. F-1 students must enroll in a minimum of 12 credit hours and maintain full-time enrollment during each regular semester in order to maintain visa status.

After admission, international students will need to present TASP scores or take the alternate assessment program. In addition to the requirements stated above, international students wishing to transfer from another U.S. institution must also:

1. Present documentation indicating valid non-immigrant status;

2. Provide official transcripts or documented proof verifying that the student is "in-status" and has been pursuing a full course of study during the term immediately preceding the transfer from the institution last authorized by INS for attendance. International students are subject to the requirements of the Texas Academic Skills Program (TASP).

Evaluation of Foreign Credentials

Coursework completed at colleges and universities outside the United States will be considered for transfer on an individual basis. All foreign credentials submitted to the college must include the original plus a certified English translation.

An official evaluation of foreign credentials must be completed before transfer credit will be considered. The student is responsible for arranging for credential evaluation. A partial list of acceptable professional evaluation services is available in the District Office of Academic and Student Programs or the Office of the College Registrar. The student is expected to pay all costs of translation and/or evaluation of foreign credentials.

Evaluations of foreign credentials completed by individuals and/or by professional evaluation services are subject to review and approval by the Director of Admissions and Registrar.

American English and Culture Institute

For international students preparing to study in American colleges and universities or planning to work in fields where English is the primary language, the DCCCD offers an intensive English program called the American English and Culture Institute (AECI). The AECI is a year around program of English and culture study that is offered in eight week sessions and is divided into proficiency levels from one through six. It is located at the Universities Center of Dallas in downtown Dallas.

Application and Admissions Procedures

Applications may be submitted any time prior to registration. Early application is essential because the student's place in registration is determined by the date of the applicant's files. Submitting admissions documents early also insures that there is adequate time for effective advisement and schedule planning. A later place in registration often means that the classes a student desires may already be filled as all District colleges conduct early registration in some form.

Applicants must submit the following material to the Admissions Office to have a complete admissions file:

A. An official application, available from any DCCCD college Admissions Office or through the Internet address of www.dcccd.edu.

B. Test Scores: Students who have TASP test scores, TAAS test scores taken within the last three (3) years, or ACT/SAT test scores taken within the last five (5) years must submit those scores to the college.

C. Official Transcripts: (1) Students who graduated from high school (and who have no college experience) are encouraged to submit high school transcripts; these will
be utilized for advisement purposes, and not admissions purposes; (2) college transfer students MUST submit official transcripts of all college work attempted before enrollment of the semester in which the student first enrolls. The College accrediting agency requires transcripts, and the College uses them in program advisement. IT IS ABSOLUTELY ESSENTIAL THAT TRANSFER STUDENTS SUBMIT OFFICIAL TRANSCRIPTS FROM ALL COLLEGES PREVIOUSLY ATTENDED. If transcripts are not submitted prior to enrollment, students can be blocked from a number of courses which require taking certain prerequisites, future enrollment of the student will be blocked and a transcript of work attempted at any DCCCD institution will not be released.

An official transcript must bear the institution’s embossed seal, and signature of the Registrar. Although transcripts sent electronically from other institutions will be considered official, a photocopy or facsimile (FAX) is not an official transcript.

D. GED: Students under the age of 18 and who have a GED must submit a copy of their GED certificate. Students entering with academic deficiencies or low assessment scores may be admitted on probation and will be required to enroll in developmental or other programs designated by the college. After being admitted but prior to registration, students must either present TASP scores or take the college assessment program.

All applicants may select only those classes available when they register. Students may enroll in certain courses at times other than regular semester registration. See the Flexible Entry courses selection in this catalog and contact the Registrar’s Office for additional information.

Students admitted to a college of the DCCCD are automatically admitted to all seven colleges of the DCCCD and, as such, may take appropriate classes at any of the colleges under certain conditions.

Reciprocal Tuition Agreement

Technical courses from the following Associate in Applied Sciences Degrees offered by the Dallas County Community College District may be taken by Collin County residents at in-county tuition rates:

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<th>PROGRAM</th>
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<tr>
<td>Apparel Design</td>
<td>ECC</td>
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<td>Dealership-sponsored Technician</td>
<td>BHC</td>
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<tr>
<td>Aviation Technology</td>
<td>MVC</td>
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<tr>
<td>Air Cargo</td>
<td>MVC</td>
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<tr>
<td>Aircraft Dispatcher</td>
<td>MVC</td>
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<td>Airline Management</td>
<td>MVC</td>
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<tr>
<td>Professional Pilot</td>
<td>MVC</td>
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<tr>
<td>Fixed Base Operations</td>
<td>MVC</td>
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<tr>
<td>Commercial Music</td>
<td>CVC</td>
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<tr>
<td>Diagnostic Medical Sonography</td>
<td>ECC</td>
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<tr>
<td>Local Area Network Administrator</td>
<td>EFC, NLC, RLC</td>
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</tbody>
</table>

Technical courses from the following Associate in Applied Sciences Degrees offered by the Dallas County Community College District may be taken by Tarrant County residents at in-county tuition rates:

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>CAMPUS</th>
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<tbody>
<tr>
<td>Apparel Design</td>
<td>ECC</td>
</tr>
<tr>
<td>Auto Body Technology</td>
<td>EFC</td>
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<tr>
<td>Automotive Technology</td>
<td>BHC, CVC, EFC</td>
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<tr>
<td>Aviation Technology</td>
<td>MVC</td>
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<tr>
<td>Construction Management and Technology</td>
<td>NLC</td>
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<tr>
<td>Construction Technology</td>
<td>NLC</td>
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<tr>
<td>Diagnostic Medical Sonography</td>
<td>ECC</td>
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<tr>
<td>Food and Hospitality Service</td>
<td>ECC</td>
</tr>
<tr>
<td>Digital Imaging Technology</td>
<td>EFC</td>
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<tr>
<td>Educational Personnel</td>
<td>ECC, RLC</td>
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<tr>
<td>Electrical Technology</td>
<td>NLC</td>
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<tr>
<td>Interior Design</td>
<td>ECC</td>
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<tr>
<td>International Business and Trade</td>
<td>RLC</td>
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<tr>
<td>Invasive Cardiovascular Technology</td>
<td>ECC</td>
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<tr>
<td>Medical Staff Services</td>
<td>ECC</td>
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<tr>
<td>Medical Transcription</td>
<td>ECC</td>
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<tr>
<td>Mortgage Banking</td>
<td>NLC</td>
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<tr>
<td>Pattern Design</td>
<td>ECC</td>
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<tr>
<td>Radiologic Sciences</td>
<td>ECC</td>
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<tr>
<td>Social Work Associate Generalist</td>
<td>EFC</td>
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<tr>
<td>Substance Abuse Counseling</td>
<td>EFC</td>
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<tr>
<td>Travel and Tourism Management</td>
<td>RLC</td>
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<tr>
<td>Veterinary Technology</td>
<td>CVC</td>
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<tr>
<td>Video Film Technology</td>
<td>NLC</td>
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<tr>
<td>Welding Technology</td>
<td>MVC</td>
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</table>
In addition, the Construction Technology program may be taken by residents of Collin, Cooke, Denton, Ellis, Grayson, Hill, Tarrant, and Weatherford counties at Dallas County tuition rates.

Tuition

Tuition is charged according to the number of credit hours for which a student is enrolled and the student's place of legal residence. Tuition is subject to change without notice by the Board of Trustees or the Texas Legislature.

Tuition Installment Pay Plan (TIPP)

A law passed by the Texas State Legislature permits students registering at community colleges to pay their tuition and fees in installments. Installment plan must be initiated before the first class day. One-half of the payment is required in advance of the official institutional first day of classes; one-quarter is due prior to the start of the sixth class week; and the final one-quarter payment must be made prior to the eleventh class week. Promissory notes must be signed at the time the first payment is made. Late fees will be assessed ($10 per payment not to exceed $20) for late installments. If courses are dropped, the refund, if any, will be applied to the balance of the installment plan. If courses are dropped and no refund is due, the balance of the installment plan must still be paid in full. Course credit may be denied to students who have not made payment in full by the end of the semester. Tuition installment pay plans are allowed only during the fall and spring semesters and do not apply to flex classes. A $15 fee is charged to all TIPP participants.

HOPE and Lifetime Learning Tax Credits

The HOPE tax credit, based upon federal law, is available for eligible taxpayers enrolling in the first two years of postsecondary education. Students must be enrolled at least halftime in a degree, certificate or other program leading to a recognized educational credential. This tax credit applies only to qualified tuition and fee expenses paid for enrollment during the tax year in question.

The Lifetime Learning tax credit is available for eligible taxpayers who are college juniors, seniors, graduate students, adults returning to college and students enrolled less than half time. This tax credit applies only to qualified tuition and fee expenses paid for enrollment during the tax year in question.

For additional information on the two tax credits, students may contact the local Internal Revenue Service, their tax preparer, or the following website: http://www.dcccd.edu/misc/tra/tra.htm. Students will receive a 1098-T by February 1, 2000 for qualified tuition and fees paid during the 1999 tax year and by February 1, 2001 for qualified tuition and fees paid during the 2000 tax year.

Additional Fees

Additional fees may be assessed as new programs are developed with special laboratory costs. These fees will always be kept to a practical minimum. A graduation fee is not assessed, but each student must pay for cap and gown rental.

Special Fees and Charges

Mandatory fees shall include, but not be limited to, registration fee, laboratory fees, class specific software fees, and private lesson fees.

Registration Fee: (Non-refundable): There will be a $5 non-refundable Registration Fee assessed each semester.

Laboratory Fee: $4 to $12 a semester (per lab).

Class Fee: Variable special costs of course not otherwise defined as "Laboratory Fee." Rental costs of specialized equipment and off-campus facilities are examples of "class fees."

Bowling Class Fee: Student pays cost of lane rental.

Private Music Lesson Fee: $45 for one hour per week (maximum) for one course, $25 for one half hour per week.

Audit Fee: The charge for auditing a course is the same as if the course were taken for credit.

Credit by Examination: A fee will be charged for each examination. This fee can change without prior notice.

Refund Policy

The refund policy of the District is based on the fact that student tuition and fees provide only a fraction of the cost of offering educational opportunities. When students enroll in a class, they reserve places which cannot be made available to other students until they officially drop the class. In addition, the original enrollment of students represents a sizable cost to the District regardless of continuance in that class. Therefore, a refund is made only under the following conditions:

(1) Official withdrawal:

Students who officially withdraw from all or a portion of their class load shall have their tuition and mandatory fees refunded according to the following schedule:

Fall and Spring Semesters (based in a 16-week semester)
Prior to the first class day of the semester.....100%
During the first fifteen class days of the semester.....70%
During the sixteenth through twentieth class days of the semester.....25%

After the twentieth class day of the semester.....NONE

Summer Semesters (based on a 5-week semester)
Prior to the first class day of the semester.....100%
During the first five class days of the semester.....70%
During the sixth class day of the semester.....25%
After the sixth class day of the semester.....NONE

*Registration fees are non-refundable even if one is due a refund.

The first "class day" is to be counted as the officially
published date when the semester begins. The first “class day” means the first day ALL classes begin for the semester, not the first day a student’s class is scheduled to meet. No refunds are issued after the last class day of each semester.

Refunds are calculated based upon net charges for hours “dropped” and “added” if occurring prior to the official reporting date.

The federal law requires that the college refund unearned tuition and fees to all first-time students receiving financial aid who have not completed 60% of the enrollment period for which they have been charged.

The calculated refund will be returned to the federal funds in the following order:
1. Federal Family Educational Load Programs
2. Federal Direct Loan Programs
3. Federal Pell Grant Program
4. Federal SEOG Program
5. Other Title IV programs
6. Student

For additional information about this pro-rata refund, contact the Financial Aid Office.

Separate refund schedules may be established for incidental fees such as intercollegiate athletics, cultural entertainment, parking, etc.

Tuition and fees paid directly to the institution by a sponsor, donor, employer or scholarship shall be refunded based on the terms stipulated by the funding source.

(2) A student may appeal a refund decision to the refund petitions committee at the campus.
(a) Refund petitions, accompanied by an explanation of any extenuating circumstances, shall be submitted to the Refund Petitions Committee on the campus.
(b) If the petition is approved by the committee, the student shall be notified and shall receive a refund of tuition and fees according to the appropriate schedules in this policy.

(3) Requests for refunds will not be accepted after the end of the semester or summer session for which the refund is sought. Cash refunds are not issued. Refund checks are mailed to the student at the address on file in the Admissions/Registrar’s Office, or if payment was originally made by credit card, the refund will be applied back to the same credit card.

(4) Refunds for withdrawal from flexible entry courses will be prorated based on the number of weeks the course spans.

(5) REFUND CHECKS NORMALLY REQUIRE A MINIMUM OF ONE MONTH FROM DATE OF APPROVAL FOR PROCESSING.

(6) The college academic calendar and the class schedule shall specify the last day for withdrawal with refund for regular semester-length courses.

Returned Checks
Checks returned to the Business Office must be paid with cash or a cashier’s check within the time limits prescribed by the notification letter. An additional fee is added for returned checks. If a check for tuition is returned by the bank for any reason, the College Business Office may submit the check to the Justice of the Peace for appropriate legal action and collection. The Vice President of Student Development may also implement disciplinary procedures. Students may be dropped from courses due to returned checks.

Assessment and Advisement Procedures
Assessment is the process of evaluating readiness for certain college courses and the probabilities for success in those courses. The College has an assessment and advisement program for entering students which is a required part of the enrollment process.

The assessment program includes the completion of a questionnaire which documents information on career and work plans, previous academic achievement and other relevant information. Assessment also includes an examination of individual skill levels in reading, writing, and mathematics. Information on skills may come from ACT, SAT, previous college-level work or from scores on the standardized tests administered by the College. Students who have taken TASP also need their TASP scores.

Because of the importance of such information, students should have official copies of TASP, ACT, RSAT, or SAT scores and transcripts mailed to the Admissions Office or make them available at the time of application. It is the responsibility of the student to have these available at the time of enrollment.

The assessment program provides information needed in advisement. Academic advisement sessions provide a framework for informed decision-making on the part of students and advisors. Information on a student’s skills, abilities, career plans, educational background, life experiences and motivation is important in helping the student and advisor make selections from the many educational options available. However, the College reserves the right to insist students enroll in the appropriate
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT
TUITION AND STUDENT SUPPORT FEES
All Semesters

<table>
<thead>
<tr>
<th>Semester</th>
<th>DALLAS COUNTY</th>
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The following definitions are brief guidelines only; please discuss any questions regarding proper tuition classification with admissions office personnel.

SPECIAL FEES AND CHARGES

The Chancellor shall be authorized to set the fees and charges for specialized services and programs provided by the District colleges. Other special fees may be assessed as new services or programs are developed with special laboratory costs. These fees will be kept to a basic, practical minimum for the program or service involved.

SEMESTER TUITION

Tuition for all semesters is as follows:

1. Dallas County Residents $23.00 per credit unit or a minimum of $25.00
2. Out-of-District Residents $43.00 per credit unit or a minimum of $43.00
3. Out-of-State Residents $73.00 per credit unit; minimum of $200.00
4. Out-of-Country Residents $73.00 per credit unit; minimum of $200.00

The charge for auditing a course is the same as taking the course for credit.

Effective Date: Spring Semester, 2000

Provided they established legal residence in the State of Texas, a student's county of residence is the county in which their legal guardian resides, if they are under 18 years of age. Students 18 years of age and older are deemed to be residents of the county in which they reside.

"Out-of-State Residents" are defined to be students of less than 18 years of age, living away from their family and whose family resides in another state or whose family has not resided in Texas for twelve months immediately preceding the date of registration; or students 18 years of age or older who have not been residents of the state twelve months subsequent to their 18th birthdays or for the twelve months immediately preceding the date of registration.

The description of resident and non-resident status contained above are generally applicable, but the determination of residence status for tuition purposes is specifically governed by the provisions of V.T.C.A. Education Code, Section 54.052, the rules and regulations of the Coordinating Board, Texas College and University System, and judicial and/or administrative interpretations thereof. In the event of conflict between the above-noted descriptions and the latter authorities, the latter shall govern.

A foreign national on any other than a permanent resident visa must pay out-of-country tuition and fees.

The tuition schedule above is subject to change without notice by action of the District Board of Trustees or the State of Texas.

By law (TEC: section 4, subchapter B, chapter 54, sec. 54.0521, 1985), the STATE OF TEXAS requires that the OATH OF RESIDENCY be signed.

The law states that if the institution later determines that the individual was not entitled to be classified as a resident at the time of the individual's registration, the individual shall pay to the institution the amount the individual should have paid as a non-resident. If the individual fails to make a timely payment as required, the individual is not entitled to receive a transcript or to receive credit for courses taken during the time the individual was falsely registered as a resident student.

THE OATH OF RESIDENCY IS NOT ACCEPTABLE IN LIEU OF DOCUMENTARY EVIDENCE.

Pursuant to the authorization contained in the Education Code, Section 130.0032, the Board authorizes a person who resides outside the District, but is a state resident and who owns property subject to ad valorem taxation by the District, or a dependent of the person, to pay tuition at the rates that apply to a student who resides in the District.

An individual who has come from outside the state of Texas and registered with a college before having resided in the state for a 12-month period immediately preceding the date of registration and his or her dependents are entitled to pay the tuition and other fees required of Texas residents if the individual has located in Texas as an employee of a business or organization that became established in this state as part of the state's economic development and diversification program authorized by the constitution and laws of the this state and if the individual files with the college a letter of intent to establish residency in Texas.
remediation shouldassessment results indicate a need for the improvement of skills in reading, writing and/or mathematics.

Details of assessment and advisement procedures are available through the College Counseling/Advisement Center, International Center, or in the "Schedule of Classes" each semester.

Students who did not have at least 3 college-level credit hours prior to the 1989 Fall Semester must take the TASP (Texas Academic Skills Program) test or an approved TASP alternate test prior to enrollment in any college-level course work. Should students fail either the reading, writing, or mathematics section of TASP or a TASP alternate test, they will be required, as mandated by Texas State Law, to enroll and participate in a developmental program continuously until all appropriate developmental courses are successfully completed or until each failed section is passed. See the TASP section in this catalog for more information on TASP requirements.

Change of Schedule

Students should be careful in registering to schedule courses only for the days and hours they can attend. Students requesting class changes should contact the Registrar's Office during the time specified in the current class schedule. No change is complete until it has been appropriately processed through the registration system.

Non-Credit Student (Audit)

A person who meets the admission requirements of the District may, with the consent of the division dean and instructor, enroll in a credit course as a non-credit student. A non-credit student may attend class, but will not receive a final grade nor credit for a course. An instructor may give such non-credit students an examination if the instructor determines the examination is an essential component of the learning process. The fee in a credit course is the same for a non-credit student as for a credit student.

Acceptance of Credit in Transfer

Credit for courses in which a passing grade (D or better) has been earned may be transferred to the College from colleges and universities accredited through one of the following associations:

- Middle States Association of Colleges and Schools/Commission on Higher Education
- New England Association of Schools and Colleges
- North Central Association of Colleges and Schools
- Northwest Association of Colleges and Schools/Commission on Colleges
- Southern Association of Colleges and Schools/Commission on Colleges
- Western Association of Schools and Colleges/Accrediting Commission on Senior Colleges
- Western Association of Schools and Colleges/Accrediting Commission for Community and Junior Colleges

It is the responsibility of the College not to transfer credits received from any United States institution not so accredited except where signed agreements between the College and other institutions exist. However, students who have gained proficiency through completion of coursework from non-accredited institutions may receive college credit through credit-by-examination and by some circumstances credit by experience.

Course-by-course evaluation will be completed by the registrar or other appropriate college personnel as needed for degree or program planning. Individual courses transferred will not be posted to the College's student record. Official transcripts from all higher education institutions must be on file in the Registrar's Office.

Students are referred to the section found elsewhere in this catalog entitled "Academic Forgiveness Policy."

Credits earned through other education programs, such as credit-by-examination, military experience, and the U.S. Armed Forces Institute, are reviewed by the Registrar and credit may be granted if applicable.

Official transcripts from all higher education institutions and a request for a degree plan evaluation must be on file before the evaluation can be accomplished in the Registrar's Office. Any questions concerning the validity of the document(s) will result in the need to have an official transcript(s) sent directly from the other institution(s) to the Registrar's Office. Transfer students admitted with a grade point deficiency cannot graduate until the deficiency is cleared by earning additional grade points.

Address Changes and Social Security Number

Each student has the responsibility to inform the Registrar's Office of changes in name or address. Each applicant for admission is asked to furnish a Social Security number. This number doubles as a student identification number and insures accuracy of student records. If a student does not have a Social Security Number, or does not choose to use the Social Security Number, the College will assign a student identification number.

TASP (Texas Academic Skills Program)

The Texas Academic Skills Program (TASP) is required by state law to ensure students enrolled in Texas public colleges possess the academic skills needed to perform effectively in college-level coursework. TASP includes a testing component designed to identify and provide information about the reading, writing, and math skills of students. The program is very complex, and students are expected to consult with the college TASP Coordinator in order to meet the TASP requirements. It is the student's responsibility to be aware of all TASP regulations.

All entering students must have DCCCD Alternate Assessment (an approved TASP alternate test), TASP or QuickTASP tests scores on file prior to enrolling for college-level courses. Students meeting the following conditions are exempt or waived from the TASP requirements:

- Have at least 3 hours of college credit prior to Fall, 1989;
- Are blind/deaf and have at least 3 hours of college credit prior to Fall, 1995
- Enroll in certain certificate programs;
- Have a baccalaureate or higher degree;
- Have ACT/SAT or TAAS scores which meet state standards for an exemption;
- Enroll as a transient student from an out-of-state or private institution;
- Are not seeking a degree AND are at least 55 years of age;
- Are not seeking a degree AND are international students;
- Have been certified by the Texas Higher Education Coordinating Board as being dyslexic or having a related disorder OR as having a math disorder. Students seeking this exemption must check with the college TASP Coordinator to ascertain what documentation must be submitted to the Texas Higher Education Coordinating Board as only that agency may grant such an exemption;
- Be an out-of-state student enrolled in official distance education courses.
- Transfer into the DCCCD from a private or out of state college/university with a transcript showing a grade of "A" or "B" in a course which the DCCCD believes is equivalent to a course on the "B or Better" list (which can be found later in this catalog).
- Be a self-declared casual, enrichment, or non-degree seeking student. Such students must be tested on TASP, QuickTASP, or the DCCCD Alternate Assessment but they do not have to participate in remediation. These students must sign a form, available in admissions, registrar or advisement offices, each semester they are enrolled. Such students will be restricted from enrolling in certain courses until TASP requirements for such courses have been met, and they will not be awarded a certificate or degree.

All other students are subject to TASP requirements.

Students who fail a section of either the DCCCD Alternate Assessment, TASP or QuickTASP must enroll and actively participate in developmental courses related to the failed area(s) or be dropped from college-level courses. (Concurrently enrolled high school students will not be mandated to take developmental courses while in high school.) Students must continue to participate in mandated developmental coursework until (1) they pass the failed section of TASP or QuickTASP test, (please note that the DCCCD Alternate Assessment cannot be used for retesting purposes), or (2) they have completed the developmental coursework required, at which time the college may release the student from such coursework. The college is not required to release the student from further developmental coursework.

Students may meet the TASP requirements in several ways: (1) Pass all sections of TASP or QuickTASP; (2) Pass all sections of the DCCCD Alternate Assessment on the initial attempt; (3) In the exact following order, take and fail a section of TASP or QuickTASP, complete all required developmental coursework with a grade of C or better, retake and fail the same section of TASP or QuickTASP, and then take and make a B or better in an approved, related college-level course; or (4) In the exact following order, take and fail a section of the DCCCD Alternate Assessment, complete all required developmental coursework with a grade of C or better, retest with TASP or QuickTASP and fail the same subject area originally failed on the DCCCD Alternate Assessment, and then take and make a grade of B or better in an approved, related college-level course. Students attempting to meet the requirements through the third or fourth methods MUST check with the college TASP Coordinator to learn of all required steps to be met. (5) The "B or Better" courses which can be used to satisfy TASP requirements (after having successfully completing Developmental coursework) are: English 1301, English 1302, History 1301, History 1302, English 2321, English 2322, English 2323, English 2331, English 2332, English 2333, English 2326, English 2327, English 2328, Psychology 2301; Government 2301, Government 2302, Government 2305, Government 2306, Math 1332, Math 1333, Math 1314, Math 1316, or higher level of math courses.

Deaf students entering Fall 1995 and thereafter are subject to all TASP regulations with the exception that they must take the Stanford Achievement Test rather than TASP, QuickTASP, or DCCCD Alternate Assessment.

DCCCD students who take the DCCCD Alternate Assessment and later transfer to another Texas public college or university will have their scores honored by the receiving institution. Transfer students from another Texas public college or university to the DCCCD will have their state-approved alternate assessment scores honored by the DCCCD.

No student may receive a degree or certain certificates without having met the TASP requirements. No student may take junior or senior level courses at a Texas public university without having met the TASP requirements.

TASP rules are always subject to change.

Additional TASP information can be found at the Texas Higher Education Coordinating Board's website: WWW.thecb.state.tx.us /

IV. ACADEMIC INFORMATION

Scholastic Standards: Grades and Grade Point Average

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

<table>
<thead>
<tr>
<th>Grade Interpretation</th>
<th>Grade Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Remediation courses are labeled with the letter "R".
Grade points earned for each course are determined by multiplying the number of points for each grade by the number of credit hours the course carries. For example, a student who takes a three hour course and earns an “A” accumulates 12 grade points for that course. A student’s grade point average is computed by adding the total grade point values for all courses and dividing by the number of credit hours attempted during the same period. For example, a student who takes the following courses and earns the following grades has a grade point average of 2.93:

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-hour course</td>
<td>A</td>
<td>8</td>
</tr>
<tr>
<td>3-hour course</td>
<td>B</td>
<td>9</td>
</tr>
<tr>
<td>4-hour course</td>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>3-hour course</td>
<td>C</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Credit Hours: 12
Total Grade Points: 35

12 / 35 = 2.93

The student’s transcript and grade reports will indicate two different GPA’s: GPA(1) is based upon all DCCCD courses in which the student received a performance grade of A-F. GPA(1) is utilized to determine Suspension/Probation status, athletic participation eligibility. GPA(2) is based upon grade points earned in all DCCCD courses in which a student received a performance grade of A-F. Courses numbered below 1000, ARTS 1170, MUSI 9176, and DRAM 1170 are not used in the calculation of GPA(2). GPA(2) is utilized to determine eligibility for graduation, honor rolls, and eligibility in Who’s Who in American Junior Colleges. It is also the GPA which may be considered by four-year institutions when a student transfers. Federal financial aid eligibility is based upon all course work which is attempted.

For repeated courses, only the latest grade earned is included in cumulative grade point averages even if the latest grade is lower than a preceding grade. However, transcripts do indicate all work attempted and completed in the District. When a student withdraws from a course being repeated, the cumulative grade point average is calculated by using the immediately preceding grade in the same course.

If a student believes an error has been made in determining a course grade, the instructor or appropriate division office should be contacted as soon as possible. Requests for grade changes will not be considered later than two years following the last day of the semester for which the grade was assigned.

An incomplete grade of “I” may be given when an unforeseen emergency prevents a student from completing the work in a course. The “I” must be converted to a performance grade (A-F) within 90 days after the first day of classes in the subsequent regular semester. If the work is not completed after 90 days, the “I” is converted to a performance grade.

An Incomplete Contract is used to convert an incomplete grade to a performance grade and states the requirements for the satisfactory completion of the course. The Incomplete Contract must be agreed upon and signed by the instructor, the student and the division dean and submitted with the final grade report. When an Incomplete Contract must be submitted without the student’s signature, the instructor must include a statement indicating that the student is aware of and in agreement with the contract.

Students who do not complete course requirements may receive a “WX” grade when the instructor determines that reasonable progress has been made and when the student can re-enroll for course completion prior to the certification date in the next regular semester. If the student does not complete the course requirements, the “WX” is converted to a performance grade.

An E grade may be given when an instructor wishes to indicate that a student has made progress in a developmental studies course. An E grade is non-punitive and is not computed. The E grade provides more flexibility for re-enrollment, particularly for students who do not achieve a C-level grade in a course. An E grade indicates that a student participated in a course according to TASP guidelines, but was unable to do C-level or passing work which would qualify the student to enroll in transfer-level courses. The E grade indicates below college skill level work, but shows that the student participated in and attended the class and attempted to do the work in the course.

Students on Federal Financial Aid need to check with Financial Aid Officer concerning E grade(s) and any impact on benefits.
Acceptable Scholastic Performance

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

Acceptable scholastic performance is the maintenance of a grade point average, based on GPA (1), of 2.0 (on a 4.0 scale) or better. Students may not be graduated from any degree or certificate program unless they have a cumulative grade point average of 2.0, based on GPA (2), or better. Grade points and hours earned in courses numbered below 1000, ARTS 1170, MUSI 9176, and DRAM 1170 cannot be used to meet graduation requirements.

Recommended Academic Load

The maximum academic load is 18 credit hours of course work per semester or five classes plus physical education. Students must receive permission of the appropriate college official to carry a heavier load. Employed students carrying a full load (12 credit hours or more) should not work more than 20 hours per week. Students working more hours should reduce their academic load proportionately. The recommended load limit for day or evening students who are employed full-time is six credit hours. The recommended load limit in a six-week summer session is six credit hours. A total of 14 credits is the maximum that may be earned in any 12-week summer period.

Classification of Students

Freshman: A student who has completed fewer than 30 credit hours.
Sophomore: A student who has completed 30 or more credit hours.
Part-time: A student carrying fewer than 12 credit hours in a Fall or Spring semester.
Full-time: A student carrying 12 or more credit hours in a Fall or Spring semester.

Class Attendance

Students are expected to attend regularly all classes in which they are enrolled. Students have the responsibility to attend class and to consult with the instructor when an absence occurs.

Instructors are responsible for describing attendance policies and procedures to all students enrolled in their classes. If a student is unable to complete a course (or courses) in which he/she is registered, it is the student's responsibility to withdraw from the course by the appropriate date. (The date is published in the academic calendar each year and in each semester's class schedule.) If the student does not withdraw, he/she will receive a performance grade, usually a grade of "F".

Students who are absent from class for the observance of a religious holiday may take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later than the 15th day of the semester, the student notified the instructor(s) that the student would be absent for a religious holiday. Sec. 51.911 Tx. Educ. Code.

Dropping A Course Or Withdrawing From College

To drop a class or withdraw from the College, students must follow the prescribed procedure. It is the student's responsibility to drop or withdraw. Failure to do so will result in receiving a performance grade, usually a grade of "F." Should circumstances prevent a student from appearing in person to withdraw from the College, the student may withdraw by mail by writing to the Registrar. A drop/withdrawal request by mail must be received in the Registrar's Office by the semester deadline. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a "W" (Withdraw) in each class dropped. The deadline for receiving a "W" is indicated on the academic calendar and the current class schedule. See "Refund Policy" for possible refund eligibility.

STUDENTS WHO WITHDRAW FROM A MANDATED REMEDIATION COURSE AS A RESULT OF TASP REQUIREMENTS MUST ALSO WITHDRAW FROM ALL COLLEGE-LEVEL COURSES.

Academic Recognition

Full-time students who complete at least 12 hours of college-level credit and earn a grade point average of 3.5-3.79 are listed on the Vice President's Honor Roll. Full-time students who complete at least 12 hours of college-level credit and average 3.8-4.0 are placed on the President's Honor Roll. Part-time students who take 6-11 college-level credit hours and maintain a 3.5 or higher grade point average are placed on the Academic Recognition List. GPA(2) is utilized to determine academic recognition.

Scholastic Probation, Scholastic Suspension, and Academic Dismissal

Scholastic Probation: A student who has completed a total of nine (9) credit hours with a performance grade of A, B, C, D or F and who has a grade point average based on GPA(1) of less than 2.0 will be placed on scholastic probation. A student on scholastic probation may have coursework and total hours limited, but may re-enroll at the college if a minimum 2.0 grade point average based on GPA(1) is earned in each semester or summer session. If a student on scholastic probation fails to meet the above requirements in a semester or summer session, the student will be placed on scholastic suspension and will not be allowed to register.

Scholastic Suspension: A student on scholastic probation who is ineligible to re-enroll shall be suspended from the college for not less than one semester.

After a student has served a first suspension, the student may petition for readmission. If readmission is approved, then a student may continue to re-enroll with completion of a semester or summer session with a GPA of 2.0 or greater.
**Academic Dismissal:** If a student does not meet the required standards and is placed on continued scholastic suspension for a second time, the student will be **academically dismissed** for a period of 12 months. Prior to application for readmission, a student must present to the admissions committee a written explanation of how the student plans to improve the student's academic standing. A student may be readmitted on continued scholastic probation, and the student's coursework and total hours may be limited.

**Indefinite Academic Dismissal:** A student who is readmitted after having been on scholastic suspension and academic dismissal, and who subsequently fails to achieve a GPA(1) of 2.0 greater, shall be placed on indefinite academic dismissal. After a period of more than 12 months, a student may be recommended for readmission only by the Vice President of Student Development or designee. It is a student's responsibility to understand and comply with academic standards and procedures of the college.

A student who is on academic suspension or academic dismissal from another institution is ineligible for admission to the college unless the student has met the academic standards required by the college.

**Grade Reports/Notification of Grades**
A grade report may be mailed to the address on record of enrollment to each student at the end of each semester.

**DCCCD Transcript of Credit**
The DCCCD transcript of credit is a chronological listing of college credit classes attempted within the seven college system of the DCCCD. The transcript is official if the document is embossed with the college seal and imprinted with the signature of the Registrar. It includes both GPA(1) and GPA(2).

Upon written request of the student, the Registrar's Office will send an official transcript to the individual student or to any college or agency named. There is a minimum of two working days required for processing. A transcript will be released only if all obligations to the DCCCD have been settled.

Transfer credits from other institutions are not recorded on DCCCD transcripts. If a student desires a transcript of work completed at another institution, the student should secure it from that institution.

**Degree Requirements**
The College confers the Associate in Arts Degree, Associate in Sciences Degree, the Associate in Sciences Degree with a major in Business, the Associate in Applied Sciences Degree, the Associate of College/University Transfer Degree, and certificates upon students who have completed all requirements for graduation. Each degree candidate must earn at least 25% of the credit hours required for graduation through instruction (not credit-by-examination) by the college granting the degree. The degree must be awarded by a college which offers the program in which the student majored. Correspondence work must be approved by the Registrar for graduation credit. If the student qualifies for a degree from more than one DCCCD college, the student must indicate from which college the degree is to be awarded.

Students seeking certificates or associate degrees must submit official transcripts of all previous work attempted before a certificate or degree will be awarded. Failure to submit official transcripts directly from the institutions attended will result in the degree or certificate not being awarded.

Students entering the DCCCD Fall 1989, or thereafter, must successfully complete all sections of the TASP (Texas Academic Skills Program) Test before a degree can be awarded. See the TASP catalog section for additional information.

To qualify for a second degree or certificate, a student must fulfill the residence requirement and must complete all required courses in the plan for the second degree or certificate.

**Associate In Arts and Associate In Sciences Degrees**
These degrees are designed as the equivalent of the first half of a baccalaureate degree. Both are general plans and may or may not satisfy the requirements of a specific transfer university. Students desiring to transfer should seek one of these degrees after consultation with the college Counseling/Advising Center. However, in keeping with Texas State law, students who complete the 48 hour credits of the DCCCD core curriculum are assured that the core will transfer to any Texas public college or university; in such instances, the DCCCD core will be substituted for the core requirements of the receiving institution. Therefore, in pursuing a degree, students are encouraged to complete the entire core within the DCCCD. Students transferring into the DCCCD from another Texas public college or university who have completed that institution's core requirements are assured that the DCCCD will accept the completion of that core in lieu of its own toward the requirements for the Associate in Arts or the Associate in Sciences degree. However, care should be taken in the selection of math and science courses to ensure that those courses also meet requirements of the proposed major at the transfer institution.

In order to receive either of these degrees, students should (1) successfully complete 61 credit hours including the 48 credit hour core of the DCCCD plus an additional 13 hours of electives, comprised of courses designed for the selected major, (2) have a grade of "C" or better in each of the three Core courses (English 1301, Speech Communications 1311, and selected math course listed below), (3) have a grade point average of at least "C" (2.00), based on GPA 2 and (4) have met all TASP requirements (if students are not TASP exempt). At the completion of these requirements students may select the title of their degree, either the Associate in Arts or the Associate in Sciences. These 61 hours may be completed at any DCCCD college and must include courses from the following areas:
COMMUNICATIONS - 9 credit hours (A GRADE OF "C" OR BETTER MUST BE EARNED IN ENGLISH 1301 AND SPEECH COMMUNICATIONS 1311)
Student must successfully complete all courses listed. English 1301 AND English 1302 Speech Communications 1311

MATHEMATICS - 3 credit hours
Students must EARN A GRADE OF "C" OR BETTER in one of the courses listed Math 1314, 1324, 1332, 1333, 1342, 1348, 1414, 2412, or higher level

LAB SCIENCES - 8 credit hours
Students must successfully complete two of the courses listed. Biology 1406, 1407, 1408, 1409 Chemistry 1405, 1407, 1411, 1412 Geology 1401, 1403, 1404, 1445 Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426
Students may NOT use the following combinations to meet this requirement: Biology 1406 and 1408; Chemistry 1405 and 1411; Physics 1401 and 1405; Physics 1401 and 2425; Physics 1405 and 2425.

SOCIAL/BEHAVIORAL SCIENCES - 15 credit hours
Students must successfully complete all of the courses listed. History 1301 AND 1302; Government 2301 AND 2302
Students must successfully complete one of the courses listed. Anthropology 2346, 2351 Economics 1303, 2301, 2302, 2311 Psychology 2301, 2314, 2316 Sociology 1301, 1306, 2319

HUMANITIES/VISUAL AND PERFORMING ARTS - 9 credit hours
Students must successfully complete one of the courses listed in each category.
Category I: Arts 1301, 1303, 1304 Dance 2303 Drama 1310, 2366 Humanities 1301 Music 1306, 1308, 1309
Category II: English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333
Category III: Cultural Studies 2370 History 2321, 2322, 2380, 2381 Philosophy 1301, 2306, 2307, 2316, 2317 Religion 1304

OTHER - 4 credit hours

Students must successfully complete Physical Education 1164 AND one of the courses listed: Computer Science 1300 or higher level COSC course.

ELECTIVES - 13 credit hours
A maximum of four physical education activity hours may be counted as credit toward requirements for graduation. The GPA for graduation is based on the credit earned for all DCCCD work and for all credit which is transferred from other institutions. The following courses will not count toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, MUSI 9176, and DRAM 1170.

Students who wish to complete this degree totally through distance learning courses should read the section entitled Distance Learning Program and consult the degree plan outline located elsewhere in this catalog.

Associate in Sciences Degree with major in Business
This degree is designed to meet the needs of students who plan to major in business but who are unsure about where they wish to transfer in order to complete a baccalaureate degree in a business field. This plan includes the DCCCD core of 48 hours. Students who complete this core are assured that the core in its entirety will transfer to any Texas public college or university; in such instances, the DCCCD core will be substituted for the core requirements of the receiving institution. Therefore, in pursuing this degree, students are encouraged to complete the entire core within the DCCCD.

This plan also includes courses designed for business majors. Students planning to transfer must consult the transfer institution's catalog to ensure selected courses in this area will both transfer and apply toward their degree at the receiving institution. Once students have decided on the specific transfer institution and a specific major within business, they are strongly encouraged to utilize the transfer degree for those hours beyond the DCCCD core. In order to receive this degree, students should successfully complete 61 credit hours including the 48 hour core of the DCCCD, the required business courses, and any elective courses to bring the total to 61 credit hours. These 61 hours may be completed at any DCCCD college and must include courses from the following areas:

COMMUNICATIONS - 9 credit hours (A GRADE OF "C" OR BETTER MUST BE EARNED IN ENGLISH 1301 AND SPEECH COMMUNICATIONS 1311)
Students must successfully complete all courses listed: English 1301 AND English 1302 Speech Communications 1311

MATHEMATICS - 3 credit hours
STUDENTS MUST EARN A GRADE OF "C" OR BETTER IN Math 1324
LAB SCIENCES - 8 credit hours
Students must successfully complete two of the courses listed
Biology 1406, 1407, 1408, 1409
Chemistry 1405, 1407, 1411, 1412
Geology 1401, 1403, 1404, 1445
Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426
Students may NOT use the following combinations to meet this requirement: Biology 1406 and 1408; Chemistry 1405 and 1411; Physics 1401 and 1405; Physics 1401 and 2425; Physics 1405 and 2425.

SOCIAL/BEHAVIORAL SCIENCE - 15 credit hours
Students must successfully complete all the courses listed
History 1301 AND 1302
Government 2301 AND 2302
Economics 2301

HUMANITIES/VISUAL AND PERFORMING ARTS - 9 credit hours
Students must successfully complete one of the courses listed in each category

Category I
Arts 1301, 1303, 1304
Dance 2303
Drama 1310, 2366
Humanities 1301
Music 1306, 1308, 1309

Category II
English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333

Category III
Cultural Studies 2370
History 2321, 2322, 2380, 2381
Philosophy 1301, 2306, 2307, 2316, 2317
Religion 1304

OTHER - 4 credit hours
Student must successfully complete both courses listed
Physical Education 1184
Computer Science 1300 or higher level COSC course

REQUIRED BUSINESS COURSES - 12 credit hours
Students must successfully complete all courses listed
Accounting 2301 or 2401 AND 2302 or 2402
Economics 2302
Math 1325

ELECTIVES - 1 credit hour
A maximum of four physical education activity hours may be counted as credit toward requirements for graduation. The GPA for graduation is based on the credit earned for all DCCCD work and for all credit which is transferred from other institutions. The following courses will not count toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, Music 9176, and Drama 1170.

Associate of College/University Transfer Degree
A student may earn an Associate of College/University Transfer through an individually-negotiated degree plan that incorporates those elements of the DCCCD Associate in Arts or Associate in Sciences Degree that fall within the student's transfer plan developed under the Student Transfer Guarantee program. Students must have completed a minimum of 61 credit hours; earned a grade of "C" or better in English 1301, the selected college-level math course, and speech (if required); a grade point average of at least "C" (2.00) based upon GPA (2); and have met all TASP requirements (if students are not TASP Exempt) to receive this degree. These 61 hours may be earned at any district college and must include:
- History 1301 and 1302 (6 credit hours)
- Government 2301 and 2302 (6 credit hours)
- English 1301 (3 credit hours)
- A math course numbered 1000 or above
- A speech communications course (3 credit hours), IF a speech course is required.

The remaining hours will be comprised of courses equivalent to those designated by the student's selected transfer institution as being applicable to the baccalaureate degree being sought. In no case will DCCCD course prerequisites be waived. Students who qualify for an Associate in Arts or the Associate in Sciences degree will be granted that degree rather than the Associate of College/University Transfer degree. Students who qualify for the Associate in Arts or the Associate in Sciences degree are not eligible for the Associate of College/University Transfer degree.

This degree may be attractive to students who wish to transfer to a private or out-of-state college or university. Students who wish to transfer to another Texas public college or university should follow the Associate in Arts / Associate in Sciences degree because that degree pattern includes the DCCCD 48 credit hour core requirements. Other Texas public colleges and universities must accept the DCCCD core requirements in place of their own core requirements.

Receiving institutions have a right to determine if they will accept grades of "D" as meeting the core requirements. Students wishing to transfer are encouraged to make a grade of no less than "C" in any core course.

Associate in Applied Sciences Degree
This degree is designed to teach specific career/technical skills. The requirements for each major in the Associate in Applied Sciences Degree are clearly shown in the curriculum patterns elsewhere in this catalog. Students seeking such a degree should become familiar with the specific required courses in the appropriate curriculum.
Students must have a minimum of 60 credit hours, a grade of "C" or better in each of the three Core courses (English 1301 OR English 2311 [whichever is required], Speech Communication 1311, AND in the math course required in the specific degree plan), a grade point average of at least "C" (2.00), based on GPA (2), and a passing score on all sections of TASP (if students are not TASP exempt) to receive the Associate in Applied Sciences Degree. These 60 hours must include the following general education requirements:

- English 1301 OR English 2311 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- Speech Communication 1311 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- A math course as required in the specific degree plan (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- English 1301 OR English 2311 (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]
- A math course as required in the specific degree plan (3 credit hours) [A CORE COURSE REQUIREMENT; A GRADE OF "C" OR BETTER MUST BE EARNED]

Unless specified courses are named within their degree plans, the following list of courses will count toward the requirements in Humanities/Fine Arts; Social/Behavior Sciences, and Science/Natural Sciences. Exceptions that require the student to receive the Associate in Applied Sciences Degree or who earn its Associate in Applied Sciences degree or who complete a certificate program. If an Associate in Applied Science or certificate program graduate is judged by his/her employer to be lacking in technical job skills identified as exit competencies for his/her specific degree or certificate program, the graduate will be provided up to nine tuition-free hours of additional skill training by a District college under the conditions of the guarantee policy.

Guarantee for Job Competency

The DCCCD makes certain guarantees to its students who earn its Associate in Applied Sciences degree or who complete a certificate program. If an Associate in Applied Science or certificate program graduate is judged by his/her employer to be lacking in technical job skills identified as exit competencies for his/her specific degree or certificate program, the guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.
11. The student's sole remedy against District and its employees for skill deficiencies shall be limited to nine credit hours of tuition-free education under conditions described above.

12. The program can be initiated through written contact with the office of the college president.

Certificate Programs

The requirements for certificates are detailed under specific programs in the Workforce/Technical section of this catalog. A "C" (2.00) grade point average, based on GPA (2) is required. The GPA for a certificate is based only on the hours used to meet certificate requirements. The following courses will not be counted toward graduation nor the GPA for graduation: Courses numbered below 1000, ARTS 1170, Music 9176, and Drama 1170. Some certificate programs do not require students meet TASP requirements in those programs which do require TASP. Students in such programs may enroll only in courses leading toward the certificate in order to maintain their TASP-waived status.

Transcript Evaluations

Students who have completed college coursework at a regionally accredited college or university who will be working toward an Associate in Arts, Associate in Sciences, Associate in Science in Business, Associate in Applied Sciences or an Associate of College/University Transfer degree or a one-year certificate should contact the Registrar's Office to request a transcript evaluation.

Procedure For Filing Degree And Certificate Plans And For Graduation

Students should request a degree plan from the Registrar's Office no later than at the end of their freshman year and preferably sooner. Official transcripts of all previous college work must be on file at the time of request for degree plans. Students following a one-year certificate program should request an official plan during the first semester of their enrollment. Application for the granting of the degree or certificate should be filed in the Registrar's Office prior to the deadline announced by the Registrar.

An annual graduation ceremony is held at the conclusion of the spring semester. Participation is ceremonial only and confers on a student no rights to a degree. December graduates may participate in the next commencement if they desire, and July and August graduates may participate in the spring commencement if they desire, but neither is required to do so. The Registrar's Office should be notified if the student wishes to participate. Instructions for graduation are mailed to all candidates prior to commencement.

In addition to other graduation requirements, students are expected to complete within five (5) years the course and hour degree requirements as outlined in the catalog in effect at the time of their entrance to a DCCCD college. Students may have the option to select a more recent catalog year in which they were enrolled, provided the degree requirements are met within five (5) years of the catalog selected and the requisite courses are still offered.

To qualify for a second degree or certificate, a student must fulfill residence requirement and must complete all required courses in the plan for the second degree or certificate.

The college reserves the right to modify curricula or to make changes as appropriate.

The student has the ultimate responsibility to select and register for courses meeting graduation requirements.

Tuition Rebate Program

The State has established a tuition rebate program for students who graduate with a baccalaureate degree from a Texas public university. Such students may qualify to receive a total of $1,000 from the baccalaureate-granting institution if they meet the following criteria: (1) must have enrolled in a Texas public institution of higher education in Fall 1997 or thereafter; (2) Must have been a resident of Texas and entitled to pay in-state tuition at all times while pursuing the degree; (3) must have received a baccalaureate degree from a Texas public university; and (4) must have attempted no more than three hours in excess of the minimum number of semester hours required to complete the degree under the catalog under which they were graduated. Hours attempted include transfer credits, course credits earned exclusively by examination, courses that are dropped after the official census date, and for-credit developmental/remedial courses.

Texas public universities are required to provide their students with appropriate forms and instructions regarding this program. Please note this rebate applies only to baccalaureate degree, and therefore, such a rebate cannot by state law, be offered by the DCCCD.

Waiving Of Scholastic Deficiency for Graduation Purposes

Any student in an academic transfer program may transfer to an Applied Science degree or Certificate program. In such a case, the student may choose to have any grades below "C" disregarded. The procedure for disregarding low grades below a "C" may only be exercised while the student
is in that career program. The GPA for an Associate of Applied Sciences degree or Certificate is based only on the hours used to meet degree requirements. If the student changes to an academic transfer program, the original conditions of the academic transfer program must be followed, including the calculation of a cumulative grade point average of all college credits earned. The procedure for waiving scholastic deficiency applies both to students of this college and to students transferring from other institutions. The student who wishes to use the procedure for waiving scholastic deficiency should so state in writing to the Registrar prior to registration and should inform a counselor of such intentions during the pre-registration advisement session.

V. EDUCATIONAL AND SPECIAL OPPORTUNITIES FOR STUDENTS WISHING TO TRANSFER

Core Curriculum

Every Texas public college and university is required by Texas law to have a core curriculum of no less than 42 credit hours. The DCCCD has a core of 48 credit hours. Students who wish to transfer from the DCCCD to another Texas public college or university are highly encouraged to begin and complete the core within the DCCCD because the receiving institution must accept the DCCCD core in its entirety and substitute the DCCCD core for its own core requirements. It is to the advantage of students that they remain and complete the DCCCD core prior to transferring because of this guarantee that the core will transfer as a whole.

Students who take some of the DCCCD core but do not complete it are assured that core courses will transfer and apply to the receiving institution's core if that institution also requires the same course(s) within its own core requirements. Students should work closely with a DCCCD advisor to ensure they are completing the courses needed for the core requirements. Students have various options to demonstrate core curriculum competencies through credit-by-exam, CLEP, etc.

Receiving institutions have the right to determine if they will accept grades of D as meeting the core requirements. Students wishing to transfer are encouraged to make a grade of no less than C in any core course. In addition, care should be taken in the selection of math and science courses as some universities have specific math and/or science courses which will apply to the choice of major fields of study.

There are a number of ways students may demonstrate they already possess the competencies taught in core courses. Among these are successfully completing an instructor-made exam or successfully completing the appropriate CLEP or DANTES exam (see Testing Center for a current list of such tests).

The DCCCD core of 48 credit hours is composed of the following courses:

COMMUNICATIONS - 9 credit hours
   English 1301 (A GRADE OF "C" OR BETTER MUST BE EARNED).
   English 1302
   *Speech 1311 OR any Foreign Language Course 1311 or higher
   *Students must select Speech 1311 if seeking an AA or AS degree; (STUDENTS MUST ALSO EARN A GRADE OF "C" OR BETTER IF THEY SELECT SPEECH 1311).

MATHEMATICS - 3 credit hours
   (Select one course)
   Math 1314, 1324, 1332, 1333, 1342, 1348, 1414, 2412, or higher level
   (A GRADE OF "C" OR BETTER MUST BE EARNED IN THE SELECTED COLLEGE-LEVEL MATH COURSE).

LAB SCIENCES - 8 credit hours
   (Select two courses)
   Biology 1406, 1407, 1408, 1409
   Chemistry 1405, 1407, 1411, 1412
   Geology 1401, 1403, 1404, 1445
   Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426
   (Students MAY NOT use the following combinations to meet this requirement: Biology 1406 and 1408; Chemistry 1405 and 1411; Physics 1401 and 1405; Physics 1401 and 2425; or Physics 1405 and 2425).

SOCIAL/BEHAVIORAL SCIENCES - 15 credit hours
   History 1301, 1302
   Government 2301, 2302
   (Select one course from the following)
   Anthropology 2346, 2351
   Economics 1303, 2301, 2302, 2311
   Psychology 2301, 2314, 2316
   Sociology 1301, 1306, 2319

HUMANITIES/VISUAL AND PERFORMING ARTS - 9 credit hours
   (Select one course from each of the three groupings)
   Category I
   Arts 1301, 1303, 1304
   Dance 2303
   Drama 1310, 2366
   Humanities 1301
   Music 1306, 1308, 1309
   Category II
   English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333
Cultural Studies 2370
History 2321, 2322, 2380, 2381
Philosophy 1301, 2306, 2307, 2316, 2317
Religion 1304

OTHER - 4 credit hours
Physical Education 1164 and Computer Science 1300 or higher level COSC course.

Academic Transfer Programs

The Dallas County Community College District offers a broad range of educational opportunities for the student whose goal is to transfer to a four-year institution. In addition to offering a strong, creative foundation for the freshman and sophomore years, the academic transfer curriculum is coordinated with a number of Texas four-year institutions to insure the transfer of credits. Although each four-year school is different, students may guarantee transferability of their courses by being active and responsible in the advisement process. By consulting the four-year institution regularly and taking advantage of the resources available at each of the DCCCD colleges, students may insure that the transfer process is a positive experience.

The Texas Education Code Section 61.078 enacted by the 71st Texas Legislature (SB 457) provides a means to aid students in resolving disputes regarding the transfer of course credits. To qualify as a dispute the course(s) in question must be listed in the Community College General Academic Course Guide Manual and be offered at the receiving institution. The sending institution, or the student working through the senior institution, must initiate the dispute. From the date a student is notified of the denial of credit, the law allows a maximum of 45 calendar days for the resolution of the dispute by the sending and receiving institutions.

In order to challenge the denial of credit, a "Transfer Dispute Resolution" form, available through the District Office of Articulation and Transfer Services (telephone 214/ 860-2453 or 2185) must be completed within 15 days after the student has been notified of the denial of credit. This form is sent to the receiving institution.

The receiving institution must then inform the student, the sending institution and the State Commissioner of Higher Education of the resolution. If need be, the Commissioner, or designate, may be called upon to resolve the dispute.

Earning an Associate Degree Prior To Transferring

During the time of attendance in the DCCCD, students may elect to earn a two-year associate degree. The Associate in Arts and the Associate in Sciences degrees are designed specifically for those students who plan to transfer to a Texas four-year institution. Both of these degrees require students to complete many of the core courses that will also be required by most senior institutions. The flexibility of these degree programs also allows students to complete many of the introductory courses specifically related to their major field of study. For those students seeking a four-year degree in Business, the DCCCD offers the Associate in Sciences with a specialization in Business. Additional information regarding this degree can be found elsewhere in this catalog, from a counselor or advisor, or on the DCCCD Transfer Information and Services' home page on the World Wide Web (http://www.dcccd.edu/trans/transfer.htm).

The Associate of College/University Transfer Degree is an individually negotiated degree designed to permit students to take only those courses which will apply toward a specific major at a specific university. Additional information about this degree can be found elsewhere in this catalog or on the World Wide Web home page listed above.

Guarantee For Transfer Credit

The DCCCD guarantees to its Associate in Arts / Associate in Sciences graduates and other students who have met the requirements of a 60 credit-hour transfer plan the transferability of course credits to those Texas colleges or universities which have chosen to participate in the DCCCD Transfer Guarantee Program. If such courses are rejected by the college or the university, the student may take tuition-free alternate courses at a District college which are acceptable to the college or university. In addition, students may receive the Associate of College/University Transfer Degree upon the completion of 61 credit hours which are included in the Student Transfer Guarantee.

Special Conditions which apply to the guarantee are as follows:

1. Transferability means the acceptance of credits toward a specific major and degree. Courses must be identified by the receiving university as transferable and applicable in Transfer Guides dated 1991-92 or later;

2. Limitations of total number of credits accepted in transfer, grades required, relevant grade point average and duration of transferability apply as stated in the catalog of the receiving institution; and

3. The guarantee applies to courses included in a written transfer guide—which includes the institution to which the student will transfer, as well as the baccalaureate major and degree sought. Transfer guides dated 1995-1996 or before can be guaranteed by filing a Transfer Guarantee form with a DCCCD Guarantee Advisor.

This guarantee is designed specifically for those DCCCD students who have made firm decisions about their major and the institution to which they plan to transfer. The DCCCD is working with a number of Texas institutions, such as the University of North Texas, Texas A&M at Commerce,
the University of Texas at Arlington, the University of Texas at Dallas, Texas Woman's University, Texas Tech University, Southern Methodist University and others, in order to make such guarantees possible. In order to secure such a guarantee, students should begin the process in their College Counseling/Advisement Center by scheduling an appointment with the Transfer Guarantee advisor.

Students who have completed a Transfer Guarantee may be eligible to receive the Associate of College/University Transfer Degree. Such students will be notified of this opportunity.

Transfer Dispute Resolution

The Texas Higher Education Coordinating Board intends that approved academic coursework transfer between Texas public institutions, providing that the course(s) are within approved transfer curriculum of the declared major field and provided that published transfer policies are met. Texas public institutions are required to notify students if approved academic coursework earned at another institution will not transfer.

Students transferring to the College can expect that approved academic courses earned at any Texas public institution will be accepted in transfer. Students who dispute a transfer decision made by the College should contact the District Office of Articulation and Transfer Services to appeal the denial of transfer credit for any approved academic course.

If an academic course is not accepted in transfer by another Texas public college or university, students can request that the College submit a Transfer Dispute Form to the receiving institution. Forms are available through the District Office of Articulation and Transfer Services to appeal the denial of transfer credit for any approved academic course.

Choosing A Major And Developing An Educational Plan

Some students will enter college with a clear idea of what major they will choose and to which senior institution they will transfer. However, the fact is that many students do not know where they will transfer or what their major may be.

There are several freshman level core courses that will apply toward most majors. Students are encouraged to use the first semester to investigate their own interests. By the second or third semester students should begin to develop a clear sense of which senior institution they will enter and the requirements for their chosen degree program. Working closely with a counselor or advisor, and utilizing current information from four-year institutions, students who plan to transfer are encouraged to follow the Associate in Arts / Associate in Sciences Degree plan as many of the required courses are often required at four-year institutions.

The Counseling personnel at each of the DCCCD campuses can provide assistance in developing a degree plan for almost any major. Listed below are some of the four-year majors students can begin in the DCCCD:

Accounting         Accounting
Advertising         Marine Biology
Agriculture         Marketing
American Studies    Mathematics
Anthropology        Medical Technology
Architecture        "Medicine
Art                Meteorology
Biological Science  Microbiology
Botany             Music
Business Administration Music Education
Chemistry          Nursing
Computer Science    Occupational Therapy
Dance               Oceanography
Dental Hygiene      Optometry
"Dentistry          Pharmacy
Dietetics           Philosophy
Drama               Photojournalism
Economics          Physical Education
Engineering        Physical Science
English            Physical Therapy
Entomology         Physics
Finance             Political Science
Fine Arts          Psychology
Foreign Languages   Public Relations
Forestry            Radio/TV/Film
Geography          Recreation
Geology            Social Work
Geology            Sociology
Health Sciences     Speech Communication
History            Speech Pathology
Industrial Arts    Teacher Preparation
Interior Design    Telecommunications
Journalism         Theatre
"Law                "Veterinary Medicine
Legal Science       Wildlife Management
Liberal Arts        Zoology
Life Sciences
Management

"These fields require study beyond the bachelor's degree.

College Resources For Transfer Students

Each of the DCCCD colleges offers many resources designed specifically for those students planning to transfer to a four-year institution. Students are encouraged to take advantage of these resources early in their collegiate experience, particularly if they are undecided upon a major or have not selected a senior institution. Many of the resources can assist students in making informed decisions when selecting courses, choosing a transfer institution, and completing all of the necessary steps in the transfer process.
World Wide Web Home Page

Many resources are available electronically on the Internet for future transfer students. The DCCCD Transfer Information and Services home page address is http://www.dcccd.edu/trans/transfer.htm. On the home page, students will find information in the following:

1. Tips on how to transfer successfully.
2. Answers to "most commonly asked" transfer questions.
3. Transfer guides for specific majors at approximately 25 Texas universities.
4. Course-by-course equivalencies for DCCCD courses at Texas universities.
5. Details on the DCCCD Transfer Guarantee Program and the Associate of College University Transfer Degree.

The Counseling/Advisement Center

Students are invited to utilize the valuable resources found in the Counseling/Advisement Center, and are encouraged to seek the advice of a counselor/advisor when planning each semester of study.

The Counseling/Advisement Center has several resources to assist students, including computerized transfer guides, a large collection of senior institution catalogs and bulletins, senior college admission application forms, and other specialized brochures and information. Students can also take advantage of several computer resources, such as DISCOVER, GIS, and SIGI. These simple computer programs are designed to help students clarify goals, identify career and occupational interests, and research information about senior institutions.

In addition, there are many activities planned especially for transfer students. These activities include College Days where officials from senior institutions visit on-campus to talk directly with students, special transfer workshops and seminars, and events designed to assist students in making career decisions.

A number of other materials are available to aid students who plan to transfer. These materials are outlined below.

Transfer Guides

Transfer Guides offer a listing, in DCCCD course numbers, of courses necessary for a number of majors at many institutions throughout Texas. Transfer Guides may be available for the following majors:

Accounting
Advertising Art
Aerospace Engineering
Agriculture
Architecture
Art
Biology
Business Administration
Chemical Engineering
Chemistry
Civil Engineering
Computer Science
Criminal Justice
Dental Hygiene
Economics
Electrical Engineering
English
Exercise and Sports Studies
Fashion Design
Fashion Merchandising
Finance
Foreign Languages
Geography
Geology
History
Motel & Restaurant
Management
Industrial Engineering
Interior Design

Kinesiology (Exercise and Sports Science)
Legal Science
Management
Marketing
Mathematics
Medical Technology
Music
Music Education
Nursing
Occupational Therapy
Pharmacy
Photojournalism
Physical Education
Physical Therapy
Physician Assistant
Physics
Political Science
Pre-Law
Pre-Medicine
Pre-Veterinary Medicine
Psychology
Radio/TV/Film
Social Work
Sociology
Speech
Speech Pathology/Audiology
Teacher Preparation
Theatre
Undecided

Although the information on these guides has been reviewed by officials at the various senior institutions, the content is subject to change, and it is the responsibility of the student to verify with the institutions of their choice the applicability of this information. Counselors and academic advisors can also assist students with preparation for majors other than those listed above.

Course-by-Course Equivalency Guides

Equivalency Guides offer a listing of how every course offered in the DCCCD that transfers to a given senior institution. This information is helpful for those students who have selected a senior institution, but have yet to determine a major. Students should note that the transfer equivalencies shown on these guides offer information on how, or if,
courses are generally accepted by the senior institution, and do not indicate how these courses will apply toward a particular major or degree program. A counselor/advisor can assist students in determining the applicability of courses to a particular major.

Common Course Numbering System
To help meet the transfer needs of its students, the Dallas County Community College District has joined the Texas Common Course Numbering System Consortium. All Texas community/junior colleges have moved to this system. Most universities are cooperating with this new numbering system indicating courses equivalent to the common course system.

Institutions teach courses similar in nature and these courses have been designated by a common number. The common number is to facilitate the transfer of these courses between and among the participating institutions. Elsewhere in this catalog can be found course descriptions for every course offered in the DCCCD. Course descriptions will indicate if a course has been assigned a common course number. Students should not assume that only courses with common course numbers will transfer.

Choosing A Catalog Year
Students who plan to transfer to a four-year school have a choice to make regarding their requirements for graduation. They may choose the catalog year under which they wish to graduate. This choice is subject to restrictions that are outlined in the four-year school’s catalog. Students should consult their advisor or the catalog of their choice to learn about any such limitations.

Transferring students should keep a copy of the DCCCD catalog, the four-year institution’s catalog, and the Transfer Guide valid at the time of initial enrollment in the DCCCD and at the time when a major was selected. DCCCD course syllabi should also be kept.

Other Things To Consider
During the time of study in the DCCCD, students should begin to determine the necessary steps for completing the transfer admission process. The process may require a great amount of preparation, and students should be certain they understand all of the requirements for admission, such as application deadlines, minimum grade-point average requirements, limitation on the number of credit hours that are acceptable in transfer, policies regarding acceptance of repeated courses, housing information, and financial aid application procedures. Of equal importance is a personal visit to the chosen institution. Many senior institutions plan special activities and campus visitation periods where students can meet with representatives from all areas of the institution.

It is the responsibility of students to know any specific requirement of the college or university to which they wish to transfer. This responsibility includes knowing course requirements, number of credit hours accepted, and grade point average requirements.

There is a limit on the number of hours taken by any one student in which the state of Texas will reimburse universities. By law, some Texas public universities may charge a higher rate of tuition to students who exceed the limit. Transfer students are urged to contact the universities to which they plan to transfer to and obtain more information concerning tuition fees.

VI. DISTANCE LEARNING PROGRAMS

The Dallas County Community Colleges’ distance learning program allows students to obtain their A.A. or A.S. degrees entirely through distance learning. For specific course options, please see the “Distance Learning” degree plan found elsewhere in this catalog. For additional details, consult the Schedule of Classes published by each college or contact 972-669-6400 for more information.

Over one hundred different distance learning courses are offered, including accounting, anthropology, business, computer science, economics, English, health, history, humanities, government, management, mathematics, nutrition, philosophy, physical education, psychology, lab sciences, sociology, Spanish, and speech.

What Is Distance Learning?
Distance Learning is a means of delivering education to students who are not physically present in the same location as the instructor. Classes are delivered to students through television, the Internet, or other types of technology.

How Do Distance Learning Courses Compare to Courses on Campus?
Each course is the equivalent of the on-campus section of the same course in terms of objectives, content, rigor, and transferability. Students must meet stated prerequisites or assessment scores where applicable.

Tuition is the same for distance learning courses as for courses on campus. Students who apply and register through the distance learning website will pay an additional distance learning fee. For information about tuition assistance, contact the Financial Aid Office.

What Kinds of Distance Learning Courses Are Available?
The DCCCD delivers distance learning through Telecourses, Online courses, Telecourse Plus (courses include video and an online component), and Live TV courses.

A TELECOURSE is delivered within the Dallas metroplex and includes:
- A series of video programs, usually two 30-minute programs per week, which can be viewed at home on TV,
taped for viewing later, or leased as a set.

- A textbook, a study guide, and, in some courses, supplemental print or software.
- Written assignments and tests at the testing center of the college of enrollment.
- A required orientation.

An **ONLINE COURSE** is available worldwide and includes:

- Lectures, notes, and assignments available to students through their office or home computers.
- Interaction with the instructor and other students provided through the use of live teleconferencing, discussion forums, and electronic mail.
- Textbook, study guides, software, and supplemental reading is required in some courses.
- NOTE: Students taking these courses must have a computer, an Internet connection, an e-mail account and Netscape Navigator 4.x or Internet Explorer 4.x or higher. Some courses also require other specific software packages.

A **TELECOURSE PLUS ONLINE COURSE** includes:

- Elements of both Telecourses and Online Courses.

The courses can be taken without visiting a campus.

A **LIVE TV COURSE** includes:

- Live classes on television which must be watched at the time of broadcast. Students’ interaction with the instructor during the class is done by telephone (from home) or microphone (from campus). Students viewing from home must have cable television and should consult the Distance Learning Section in the College Schedule of Classes for details about which cable companies in Dallas carry these courses.
- A textbook and, in some courses, supplemental print or software.
- Written assignments and tests at the testing center of the college of enrollment.
- There is a required orientation.

**How Do I Register?**

Register just as you would for any other course on campus. See admission and registration information elsewhere in this catalog. Or, if you live outside the Dallas Metroplex register through the Dallas Telecollege at http://telecollege.dcccd.edu

**Will Distance Learning Courses Transfer to Other Institutions?**

A distance learning course will transfer in situations where the on-campus section of the same course will transfer; however, students who plan to transfer to a four-year institution must consult the catalog of that institution and work with an advisor in planning their academic program. Material about transfer information is available in the Counseling Center. For the distant student, a list of colleges with whom Dallas has transfer agreements is listed at the Dallas Telecollege website: http://telecollege.dcccd.edu

**How Can I Get More Information?**

Read the course descriptions in the Schedule of Classes for each semester or call the Distance Learning Hotline at 972-669-6400.


For recorded voice mail information, please call 972-669-6410 (touch-tone telephone only!) and follow the directions to access the information you need.

**VII. OTHER EDUCATIONAL PROGRAMS**

**Workforce/Technical Programs**

Students who are interested in preparing for a career in a chosen field as a skilled employee after one or two years of college work may enroll in one of the many workforce/technical programs offered by the College. These programs are established only after studies verify that employment opportunities exist in business and industry.

Workforce/technical courses are accredited college courses which lead to a Certificate or an Associate in Applied Sciences Degree. These programs are designed for a student to complete the program within one or two years.

With the assistance and cooperation of representatives from local business, industry, and public agencies, the workforce/technical programs are designed to meet the increasing workforce needs of the local and regional industries. These programs provide individuals the opportunity to develop the necessary competencies to meet the demands of area employers. The college offers a Guarantee for Job Competency for all students who earn a Certificate or an Associate in Applied Sciences degree.

Placement assistance is available for students in workforce/technical programs. A continuous liaison is maintained with local and regional industries to keep students informed of employment opportunities.
**Workforce Education Course Manual (WECM)**

The Workforce Education Course Manual (WECM) is a statewide inventory of workforce education courses offered for Semester Credit Hours and Continuing Education Units that community colleges can use to respond rapidly to the needs of business and industry. Instead of each institution creating courses and programs "from scratch", the WECM offers a means for the continual design and updating of high quality workforce courses through collaboration with business/industry and the combined expertise of community college faculty from across Texas.

Courses cited in the WECM are approved from the Texas Higher Education Coordinating Board for use by all Texas public community and technical colleges. Therefore, students who earn semester credit hour and Continuing Education Units by successfully completing the requirements for the course(s) will be able to transfer the credits or CEU's to another Texas public community or technical college that also offers the same course(s).

**Tech-Prep**

Students can earn college credit while in high school through Tech Prep. Each DCCCD Tech Prep program is a planned sequence of course work developed cooperatively between the public school districts and the DCCCD. These programs are supported and approved by both the Texas Education Agency (TEA) and The Texas Higher Education Coordinating Board (THECB). Approved programs for DCCCD are indicated in this catalog with the degree plans/curriculum patterns section.

Tech Prep is a college prep program that prepares students for technical careers.

Each program prepares students for direct entry into the workplace as technically skilled employees and also provides students with opportunities to earn an advanced skills certificate or to further their studies at area universities.

**High school students follow these PREP steps to participate in Tech Prep:**

1. Pick a Tech Prep career program offered at your high school.
2. Register to take the high school Tech Prep course work.

**After high school graduation**

3. Enroll in the Tech Prep program at one of the DCCCD colleges. When you identify yourself as a Tech Prep student, a counselor will help you determine the next level course you will need to complete with a grade of C or better.
4. Petition to articulate high school Tech Prep course work credit into the program degree plan and complete the college course work.

For more information about Tech Prep career preparation programs contact the counselor or career and technology teacher at your high school or call the DCCCD District Tech Prep office at (214)-860-2324.

**Credit-By-Examination**

Students who believe they already meet the requirements of a course by experience or previous training may request credit by examination. Students may not request credit-by-examination in courses for which they are currently enrolled. The Registrar's Office has knowledge of courses available through this method. The examination may be an approved subject exam (not a general exam) of the College Level Examination Program (CLEP), Advanced Placement Exams (CEEB), Defense Activity for Nontraditional Education Support (DANTES), or an instructor-made test, depending on the course. Students should ensure DCCCD acceptance of specific national exams prior to taking them. Scores for national testing programs, such as CLEP, AP, and DANTES, will be valid for 10 years.

The student must pay an examination fee for each course examination. This fee must be paid prior to taking the examination and is not refundable. Final acceptance of credit-by-examination for specific degree purposes is determined by the degree-granting institution. Students planning to use credit-by-examination to meet degree requirements at other institutions should check the requirements of the receiving institution.

Students must be currently enrolled at a DCCCD college to receive credit by examination. While students currently enrolled in a course are not normally eligible for national testing programs, the foreign language curriculum committee permits an exception to this policy for students enrolled in foreign language courses. Students may earn as many credits through examination as their ability permits and needs require, but at least 25% of the credit hours required for graduation must be taken by instruction and not by credit-by-examination.

Credit by examination may be attempted only one time in any given course, and a minimum score must be earned in order for credit to be recorded. Those who successfully complete an approved national exam are granted "CR" for credit rather than a grade.

As of the publication date of this catalog, the following national tests are approved for credit-by-examination procedures:

**CLEP Subject Exams (CLEP General Exams are NOT approved)**

<table>
<thead>
<tr>
<th>Test</th>
<th>DCCCD Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro. Accounting</td>
<td>ACCT 2301, 2302</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>ACCT 2301, 2302</td>
</tr>
<tr>
<td>Intro. Management</td>
<td>BGMT 1370</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>BGMT 1370</td>
</tr>
<tr>
<td>General Biology</td>
<td>BIOL 1406, 1407</td>
</tr>
<tr>
<td>Intro. Business Law</td>
<td>BUSI 2301</td>
</tr>
<tr>
<td>General Chemistry</td>
<td>CHEM 1411, 1412</td>
</tr>
<tr>
<td>Intro. Macroeconomics</td>
<td>ECON 2301</td>
</tr>
<tr>
<td>Intro. Microeconomics</td>
<td>ECON 2302</td>
</tr>
</tbody>
</table>

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Students taking advantage of these tests should check with the Office of the Registrar to ensure these tests will be accepted in lieu of coursework. This should be done prior to taking the test as the above list may change. Students may challenge courses not on this list by taking an instructor-made examination. Students interested in this method should contact the appropriate academic division office.

**Credit for Experiential Learning**

Because individuals learn in a variety of ways and through a multitude of experiences, the college has established a means by which students may earn credit for college-equivalent education acquired through earlier schooling, work, or other life experiences. Such credit is only applicable to an Associate in Applied Sciences Degree or Certificate. Portfolio assessment is the method by which the prior learning must be documented. Currently enrolled students may petition for credit by developing a portfolio that describes and documents pertinent learning comparable to that available in a specified college course. A faculty member in the appropriate program area evaluates the portfolio and determines commensurate credit. In order to petition for experiential learning the student must:

1. Be currently enrolled in the college assessing the learning experiences;
2. Completed at least 12 semester hours of course work within the DCCCD, six of which must be in the student's major technical or workforce development area before credit is awarded; and
3. Enroll in Human Development 0110 to learn the necessary skills to develop the portfolio.

The number of equivalent credits awarded may not exceed 25% of the total number of credits required for the specific degree or certificate. The number of equivalent credits awarded may not exceed the total number of credits required for the student's specific associate degree or certificate objectives. No graduation, residency, degree or certificate program requirements will be waived as a result of credits earned through this process.

**Flexible Entry Courses**

In keeping with its commitment to meet individual educational needs, the College makes available flexible entry courses. These courses are often self-paced, allowing students to work at their own speed. Students are cautioned to be aware of the time specified by the College as to when the course requirements need to be completed. Students
should check with the Registrar to determine times for registration in these courses. Approval must be obtained for enrollment.

**External Learning Experiences for Workforce/Technical Programs**

An external learning experience for workforce/technical programs is a competency-based learning experience, paid or unpaid, that enhances lecture and laboratory instruction, and is provided at a work site appropriate to the program. The external learning experience allows the student to have practical, hands-on training and to apply learned concepts and theories in a workplace setting. There are four types of external learning experiences: co-ops, practica, internships and clinicals. Clinical experiences must take place in a health care setting and students must not be paid for the learning experience.

External Learning Experience work sites must be approved by the College and employers must be willing to enter into training agreements with the College and the student/employee. The College will assist a student in seeking approvable employment, if needed. Workforce/Technical programs which include external learning experiences are indicated in this catalog. Prior to enrollment in one of these courses, students must consult with the Program External Learning Experience Coordinator.

**International Studies/Study Abroad Opportunities**

An important part of the DCCC’s commitment to enhancing student appreciation and understanding of diverse cultures is its international studies/study abroad programs. These programs are available in a variety of countries during both the regular semesters and in the summer. Semester-length programs are currently available in England, France, Mexico, Spain, Italy and Ireland. In most programs, no prior knowledge of a foreign language is required. Many of the campuses also offer study-abroad opportunities during the summer sessions. Such courses are taught by DCCC faculty and normally last two to four weeks. In previous years, these courses have been offered in Austria, Australia, China, Dominican Republic, France, Great Britain, Russia, Mexico, Jamaica, Spain, and Italy. For information about any of the semester-length or summer programs, contact the District Office of Student and Academic Programs or contact the Study Abroad Advisor at the college. There are also other non-semester length courses offered during the year. Please check with the campus Vice President for additional information on these courses.

Texas residents who are students from institutions belonging to the North Texas Community College Consortium may enroll in DCCC international courses by paying “in-District” tuition charges plus related fees.

**Human Development Courses**

The Human Development curriculum is comprised of several different courses that provide a theoretical and practical foundation in human growth and development across the life span. These courses are organized around different topics including educational and career/life planning; interpersonal communication; personal and social growth; learning theory and study skills; and success in college. Some campuses offer special sections of Human Development courses that emphasize various issues such as understanding multi-cultural concepts, making life transitions, and appreciating gender differences for special populations including women returning to school, adults making career or job changes, at-risk students, young adults, or academically under prepared students.

Human Development courses transfer to many four year institutions as elective credit. These courses use an experiential model that allows for the use of a wide variety of teaching/learning strategies including small group work, journal writing, mini-lectures, selected readings, classroom discussion, team teaching, peer teaching, outside guest speakers, psychometric testing, and volunteer experiences in the community.

**Developmental Education**

Many levels of Developmental Writing, Developmental Reading, Developmental Math, and English as a Second Language courses are offered to enable under prepared students to complete the prerequisites for college-level work and to satisfy TASP remediation requirements. Students with low assessment test scores will be advised to enroll in developmental courses. Other students who wish to review and improve basic skills may also elect to take one or more developmental courses. Students who fail a portion of the state mandated TASP Test will be required to participate continuously in developmental coursework until they retake and pass the failed section. Failure to attend and participate in the required developmental coursework will result in administrative withdrawal from all college-level classes.

**Evening and Weekend College**

In order to serve those people whose work schedule and/or personal involvements make it impossible for them to attend college during normal daytime hours, most courses offered during the day are also available in the evening or on the weekend. Courses are offered both on campus and at selected community locations.

Evening and weekend courses offer high quality instruction and excellent facilities. A variety of student services, including advisement, health, library, bookstore, food services, financial aid, and recreation may be available. Instructors are selected from the College’s own full-time staff, from outstanding Dallas area educators, or from other professional specialists interested in teaching. To enroll in the evening and weekend courses, contact the Director of Admissions.

**Library and Student Obligations**

The DCCCD Libraries have as a primary mission orienting all students to the information environment and
increasingly complex world of information resources. Each library provides orientation classes to teach access procedures to students so that they may find resources to augment their classroom experience.

There is an information center on each campus where students will receive assistance in locating print, non-print materials, electronic full-text resources, the Internet and database services to supplement classroom learning. Each library has a growing collection of books and journals on a wide variety of subject areas to support academic transfer programs and technical/occupational programs. Other resources provided may include slides, tapes, compact discs, computer software, videotapes, films and digital video disks. In addition, there are special collections of career materials, pamphlets, popular and technical periodicals and newspapers.

Willful damage to library materials (or property) or actions disturbing users of the library may lead to the loss of library privileges. Damage cases are referred to the appropriate authorities for further action. All books and other library materials must be returned before the end of each semester. No transcript is issued until the student's library record is cleared.

Reserve Officers Training Corps

The DCCCD offers a program in ROTC in cooperation with the University of Texas at Arlington. The ROTC program provides a unique opportunity for students to assess and develop their leadership skills. A wide variety of settings are provided to expose students to the styles, techniques, and tools of leadership. It also develops college-educated officers for the active Army and the reserve components. This affords the student the opportunity to pursue either a civilian or military career after completing college.

ROTC credits may be used in the completion of a college degree by applying them to elective hours. Military science may be used as a minor course of study in many degree programs at the University of Texas at Arlington. To be eligible, the student must be enrolled in the ROTC program, must receive acceptance of military science as a minor from his/her major degree department, and must complete 18 hours of military science, 10 of which are advanced. Students who participate in ROTC while enrolled in the DCCCD will be eligible to apply for ROTC scholarships to complete degrees at UTA. The U.S. Army Scholarship Program provides an excellent way for young men and women to obtain assistance in financing a college education. Every scholarship provides for payment of all expenses incurred for fees and tuition, an allowance for books and supplies, and $150 a month for up to 10 months per year.

Servicemen's Opportunity College

In cooperation with other community colleges in the United States, colleges of the Dallas County Community College District participate in the Servicemen's Opportunity College. Through this program, students can plan an educational experience regardless of location requirements of the military. While military service, per se, carries no equivalent college credit, coursework earned in the military MAY result in equivalent college credit with appropriate documentation. For further information contact the Registrar's Office.

Continuing Education Programs

Within the Dallas County Community College District, Continuing Education delivers flexible, diverse, visionary instruction responsive to the needs of its public, private, and corporate citizens. Continuing Education provides workforce training, personal and professional development courses, and other outreach programs to enhance individual, community and economic development including customized training for business and industry.

Continuing Education instructors are professionals from the community chosen for their knowledge, expertise and experience in their field. Training and instruction are offered as courses, programs, seminars, workshops and distance learning opportunities. Registration is continuous, convenient and customer-oriented with new classes starting at various times during the semester. Continuing Education classes are held on the college campus and in a variety of locations throughout the community. Classes are held on weekdays and weekends, both during the day and evening hours.

A variety of student services are available for CE students including financial aid, library privileges, placement assistance and tutoring/counseling. Scholarship and grants are available for specific programs and courses. To apply for these funds please inquire at the Continuing Education Office.

Continuing Education Units

Continuing Education Units (CEUs) are transcripted upon successful completion of approved vocational course competencies. In all recognized educational circles, one CEU is equal to ten contact hours of participation in an organized Continuing Education or extension experience. The CEU is a means of recording and accounting for Continuing Education activities and meeting the certification requirements of certain professional organizations.

The Bill J. Priest Institute for Economic Development

Focusing on our customers' needs, we assist individuals and organizations in improving business performance through assessment, training, counseling and job placement.

Assessment

Our staff assists you in assessing your needs so we can determine which of our services can help you accomplish your goals. These services are customized for each customer and could include assessing an individual's literacy and workplace skills, profiling the skills needed for a
specific job or assessing job candidates to determine if they meet the qualifications of our employer customers.

Other testing services include GED exams, correspondence testing, credit by exam, ESL assessment and various national certifications, licensing and board exams for professional groups.

Training

We offer short-term intensive vocational training to individuals. In six months or less, our students have the skills employers need because we work with business leaders to develop training that prepares them to do the jobs in demand throughout the Metroplex.

Companies come to us for training, too. Whether a company needs to train its managers to make meetings more effective or give line workers the technical skills they need to reduce cycle time and waste, the Bill Priest Institute offers organizational assessments and training solutions that improve business performance. We deliver our training at the company's site any time – before work, after work, during lunch, in the evening or on weekends.

In addition to customized training, we offer a variety of seminars and public workshops throughout the year on a variety of topics from leadership to computer software applications. These courses require a day or less away from the office.

In addition to training, we offer young, service-oriented companies the facilities they need to thrive during their first four years of business, including affordable office space and related services.

Counseling

Our counselors are committed to guiding each customer toward achieving his or her goals. For some customers we offer counseling to ensure they successfully complete a job training program and begin a new career. Other customers who wish to start a business or seek advice on managing an existing small business come to us for free, one-on-one counseling on a variety of topics. Training topics include marketing, accessing capital, business expansion, buying or selling a business, business start-up, international trade, government contracting, patents, copyrights, trademarks, environmental regulation compliance and manufacturing.

Job Placement

We help our graduates develop resumes and conduct self-directed job searches using the Dallas County Community College District Resume Referral and Job Listing Service, a partnership with Career Connections.

VIII. STUDENT DEVELOPMENT

The College is committed to providing opportunities for each individual student's total educational development. Specific student services are integrated with the instructional program of the College to address individual needs for educational, personal, social, cultural, and career development.

Student Programs and Resources

The Student Programs and Resources Office plans and presents a wide variety of programs and activities for the general campus population and the surrounding community, including lectures, art gallery activities, and performance events. Programs often are coordinated with the various instructional divisions to provide students with valuable educational experiences. Leadership conferences, retreats, diversity training, and service learning programs offer students opportunities to develop skills that may enrich the quality of their own lives and the life of their community. Student Programs and Resources seeks to involve students meaningfully in campus life. Recent research in higher education indicates that for many students involvement is an important contributor to academic success.

The Dallas County Community College District invites all students to take an active role in their college experience. There are many opportunities for students to become involved in the decision-making processes for the college. You may want to join a student club, participate in student government/ambassador activities, or serve on one of several committees engaging in real decision making for the College. Depending on the college you attend, students may be involved regularly in decisions regarding:

• determining improvements for an aspect of the college (facilities, services provided, instruction, etc.);

• programming speakers and special events offered to the student body;

• participating in student disciplinary hearings;

• conducting (or completing) surveys and questionnaires designed to gather information about your college experiences; and

• assisting in the selection process of new college administration.

Counseling/Advisement Services

Individuals may find counseling/advisement services helpful as they make plans and decisions in various phases of their development. For example, counselors and academic advisors can assist students in selecting courses of study, determining transferability of courses, choosing or changing careers, gaining independence, and confronting problems of daily living. Assistance is provided by the counseling/advising staff in the following areas:

1. Career counseling to explore possible vocational directions, occupational information, and self appraisal of interest, personality and abilities.

2. Academic advisement to develop and clarify educational plans and make appropriate course choices.

3. Confidential counseling sessions to assist students in managing the academic environment and dealing with issues which may hinder success.

4. Small group discussions led by counselors focusing
on such areas as interpersonal relationships, test anxiety, and assertiveness. Counselors will consider forming any type of group for which there is a demand.

5. Crisis intervention and referral sources to provide in-depth assistance for such matters as legal concerns, financial aid, tutoring, job placement, medical problems, or emotional problems.

Tutoring Services
For students needing special assistance in course work, tutoring services are available. Students are encouraged to seek services through self referral as well as through instructor referral.

Assessment/Testing Center
The Assessment/Testing Center offers a variety of testing services which meet the expressed needs of students, staff and community. Some of the services provided include:

1. Academic Testing - supports instructional programs by providing: instructor's tests, make-up exams, self-paced exams and distance education testing.

2. Assessment Testing - provides approved alternate TASP testing which meets both TASP and placement requirements.

3. Standardized Exams - includes national and state exam programs such as: TASP, ACT, SAT, CLEP, GED, etc.

4. Psychometric Testing* - involves assessment of: personality, Vocational Interests, Aptitude, and many others.

Individuals desiring to take tests in the Centers must provide picture identification before receiving test materials. (Some Centers may also require the student identification card.) *Students must be referred by a counselor/faculty member for psychometric testing.

There is a charge for some test services. For additional information, please contact the Assessment/Testing Center of the campus you plan to attend.

The Student Code of Conduct provisions regarding disruptive behavior and/or academic dishonesty apply equally to Assessment/Testing Centers and classrooms. Irregularities will be referred to the proper authorities for disciplinary action.

Health Services
The Health Center is a multi-purpose facility that promotes health, wellness, and preventive care for the college community. Registered nurses coordinate and provide the health services which include:

- First aid for accident, injury or illness
- Health information and brochures
- Some over-the-counter (non-prescription) medicines such as Tylenol, aspirin and antacids
- Referral information for community health services

- Selected health education and screening programs
- Confidential health counseling
- A rest area

The health services are available to current students and staff. Students do not need to be sick to come to the Health Center. Health questions and concerns are welcomed. Students with chronic health problems are encouraged to visit the Health Center to discuss any special concerns with the nurse before attending classes and/or whenever problems arise. No information about the individual's health is released without the written permission of that individual unless required to do so by law.

Student Health Insurance
Optional student health insurance, with optional coverages of spouse and children, is available at the college. This limited coverage policy is administered by a local insurance company for a relatively inexpensive fee.

Career Planning and Job Placement Services
The Dallas County Community College District provides career planning and job placement services free of charge to DCCCD students, alumni, former students, and those in the process of enrolling. Although services may vary among DCCCD colleges, most Career Planning and Job Placement Offices provide opportunities for students to learn job search skills such as how to establish employment contacts, complete an application, write a resume and cover letter, and interview for a job.

In addition, some Career Planning and Job Placement centers offer services such as career testing, and computerized career guidance programs are provided to assist with the career decision making process.

Job listing services are provided on each campus, and all DCCCD colleges participate in a computer-assisted job bank which contains full and part-time opportunities in the Metroplex. All Career Planning and Job Placement Offices strictly adhere to EEO and Affirmative Action Guidelines. Employers listing positions with the DCCCD Job Placement Service must be EEO employers. All services are free of charge.

Disability Services/Special Services Offices
The Disability Services/Special Services Offices offer a variety of support services to enable students with disabilities and/or special needs to participate in the full range of college experiences. Services are coordinated to fit the individual needs of the student and may include the following: sign language interpreting, note-taking, tutoring, mobility assistance, reading/audio taping, and loan of specialized equipment such as audio tape recorders, talking calculators, raised-line drawing kits, and large print materials. Academic and career advisement services, testing accommodations, registration assistance, and extensive information and referral services are also available. Students with disabilities and/or special needs
who wish to request accommodations are responsible for documenting their needs and should initiate their request with the Disability Services/Special Services Offices, preferably one month prior to registration. Orientation and registration information will be provided.

Students with disabilities attending any DCCCD college have a right to appeal decisions concerning physical and academic accommodations by submitting a written petition to the college’s designated Americans with Disabilities Act (ADA) Compliance Officer.

For additional information, please contact the Disability Services/Special Services Offices at the college you plan to attend.

**Student Organizations**

Information about participation in any organization may be obtained through the Student Programs and Resources Office. The development of student organizations is determined by student interest. Categories of organizations include co-curricular organizations pertinent to the educational goals and purposes of the College; social organizations to provide an opportunity for friendships and promote a sense of community among students; service organizations to promote student involvement in the community; pre-professional and academic organizations to contribute to the development of students in their career fields.

**Phi Theta Kappa**

Phi Theta Kappa is the international honor society for community colleges. Founded in 1918 to give prestigious recognition to students with excellent scholarship and character, Phi Theta Kappa has always maintained fidelity to its founders’ commitment to provide enrichment in four hallmarks: scholarship, leadership, service, and fellowship. Phi Theta Kappa features some of the nation’s finest educational programs for community college students. These programs form the cornerstone of the Dallas County Community College District’s successes in nurturing intellectual curiosity, good citizenship, and leadership potential. Many scholarship opportunities are available including The USA All American Scholarships and the Guistwhite Scholarship Program.

**Who's Who Among Students in American Community Colleges**

Selections to Who's Who Among Students in American Community Colleges are made each fall at each of the Dallas County Community College District campuses. Who's Who is a highly regarded honor reserved for outstanding second-year college students eligible for the program. In general, students are recognized at Graduation and at a convocation in the spring.

**Intercollegiate Athletics**

The purpose of the intercollegiate athletic program is to provide opportunities for female and male athletes to continue educational activities in sports. Bringing together those students with motor skills beyond the level of the college physical education class and/or intramural offerings, the program promotes physical fitness, intellectual development, social interaction, sportspersonship and team commitment. Additionally, the athletic program strives to be a force for bringing together both participants and spectators of diverse ethnic and cultural backgrounds. Participation on athletic teams is voluntary on a non-scholarship basis for women and men meeting requirements established by the Metro Athletic Conference and the National Junior College Athletic Association. Most teams are associated with the N.J.C.A.A. and conference champions compete at regional and national tournaments. In the last several years, the DCCCD institutions have been the national champions in basketball, taken second place in the national baseball tournament, have been regional champions and participated in the district tournament in both men’s and women's soccer. For more information regarding eligibility, rules, standards, and sports offered, contact the Physical Education Office.

**Intramural Sports**

The Intramural Sports program provides opportunity for men and women to participate in a variety of individual, dual and team sports in a supervised recreational setting. Students can enrich their campus life, have fun, make new acquaintances and obtain beneficial exercise through the intramural program on the campus. For additional information, contact the intramural director in the Physical Education Office or the Student Programs and Resources Office.

**Housing**

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

**College Police Departments**

Campus safety is provided within the framework of state law to “protect and police buildings and grounds of state institutions of higher learning.” All laws of the State of Texas are applicable within the campus community. Officers of the College Police Departments are licensed Peace Officers of the State of Texas; they are specifically trained and educated to protect life and both College and personal property. These officers are vested with full authority to enforce all Texas laws and rules, regulations, and policies of the College, including the Code of Student Conduct.

All colleges of the DCCCD comply with the provisions of the Campus Security Act of 1990, Public Law 101-542. Copies of the document for each campus are available upon request through the College Police Department.

**Drug-Free Schools and Communities Act**

To satisfy the requirements of the “Drug Free Schools and Communities Act,” the DCCCD, its colleges and facilities are committed to creating an educational and work
environment free from use or distribution of illicit drugs and abuse of alcohol. All of the DCCCD facilities prohibit the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees on its property or as part of any of its activities. Information and confidential referrals concerning counseling and treatment programs for drug and alcohol abuse may be obtained from the Counseling/Advisement Center, Health Center, and Location Human Resources Office.

IX. FINANCIAL AID

Reauthorization of the Higher Education Act of 1965 was signed into law by President Clinton on October 7, 1998 which provides financial aid to eligible students.

Financial aid is available to help those students who, without such aid, would be unable to attend college. The primary resources for meeting the cost of education are the students, the parents and/or spouse. Financial aid, however, can remove the barriers from those families who cannot afford the cost of education beyond high school and can fill in the gap for families who can afford only part of the cost.

How to Apply

Apply for admission to the Dallas County Community College. The Free Application for Federal Student Assistance (FAFSA) must be completed using data from the Federal Income Tax Return. This form is used to provide an analysis of the financial need. It may be obtained from a high school counselor or from any DCCCD Financial Aid Office. In addition, you are strongly encouraged to apply electronically through the Internet at http://www.fafsa.ed.gov. If you decide to file a paper application then the FAFSA is to be mailed directly to the address indicated on the application. Six weeks should be allowed for processing. The student should mail the FAFSA at least TWO MONTHS before the priority deadline for the semesters for which the student is applying.

The Department of Education will randomly select some applicants and require that information reported on the FAFSA be verified for accuracy. If the student’s application is one that is selected, the student will be required to provide additional documents before financial assistance can be awarded.

The Department of Education matches data such as, the Selective Service, Immigration and Naturalization Service (INS) and the National Student Loan Data System. If the match with INS has not confirmed a student’s noncitizen eligibility, the college must submit the copy of the student’s document to INS so the confirmation can be completed. Additionally, the social security number of each federal assistance applicant will be verified by the Federal Social Security Administration. If the number listed by the applicant does not match the records of the Federal Social Security Administration, the application will be returned to the student unprocessed.

For students who attended other colleges, universities, vocational or trade schools, a Financial Aid Transcript may be required from each previous institution, even if no aid was received from a previous school.

Students born after December 31, 1960, and who are required under the Military Selective Service Act to register for the draft, must do so before financial aid can be approved.

Priority Processing Dates

YOU MUST APPLY FOR ADMISSION TO THE DALLAS COUNTY COMMUNITY COLLEGE DISTRICT BEFORE YOU CAN BE CONSIDERED FOR FINANCIAL AID. Application for financial assistance received by the following dates will be given first priority:

- Academic Year - May 1
- Spring Only - October 1
- Summer Sessions - April 1

APPLICATIONS RECEIVED AFTER THESE DATES WILL BE PROCESSED AS TIME AND AVAILABILITY OF FUNDS PERMIT. Late applicants need to be prepared to pay their own registration and book costs until their application can be completed. Applicants should contact the Financial Aid office at the school that they plan to attend for additional deadlines and requirements.

The student must reapply for financial assistance once each academic year (fall/spring). The award does not continue automatically beyond the period awarded.

Registration Deadlines in order for financial aid to pay:

- Fall 2000 - Register by September 2, 2000
- Spring 2001 - Register by January 20, 2001

Grants

Federal Pell Grants

The Federal Pell Grant is a federally funded program designed to help undergraduate pre-baccalaureate students continue their education. The purpose of this program is to provide eligible students with a “foundation” of financial aid to assist with the cost of attending college.

All students applying for financial assistance through the College must apply for a Federal Pell Grant. This is done through the FAFSA application discussed earlier. (See How to Apply). Other types of financial aid may be awarded if the student applies and qualifies. Eligibility for a Federal Pell Grant is based on financial need and satisfactory academic progress. The application process takes approximately 6-8 weeks. In response to the Federal Pell Grant application, the Department of Education will provide a Student Aid Report (SAR) to the student. The student should immediately review the SAR to make sure it is correct. The exact amount of the Federal Pell Grant award will depend upon the Estimated Family Contribution (EFC) on the SAR and the number of hours for which the student enrolls.

Federal Supplemental Educational Opportunity Grant (SEOG)
The Federal SEOG program provides assistance for eligible undergraduate students who show exceptional financial need and are making satisfactory academic progress toward their educational goal. The actual amount of the grant will vary depending on the availability of funds at the school, the student's family financial condition, and other financial aid the student is receiving. Priority is given to students receiving the Federal Pell Grant and having very limited Estimated Family Contribution (EFC). Students must apply each academic year for the Federal SEOG.

Texas Public Educational Grant (TPEG)

The TPEG Program was enacted by the 64th Texas Legislature to assist needy students attending state-supported colleges in Texas. To be eligible students must show financial need and be making satisfactory academic progress toward their educational goal. The actual amount of the grant will vary depending on the availability of funds at the school, the student's family financial condition and other financial aid the student is receiving. Grants are awarded on a first-come, first-served basis. This grant is available to students enrolled in credit and certain continuing education courses. Students must apply each academic year for the TPEG.

Texas Public Educational-State Student Incentive Grant (TPE-SSIG)

The TPE-SSIG Program is a state grant that is matched with federal funds to provide financial assistance to needy students attending state-supported colleges in Texas. To qualify students must make satisfactory academic progress toward their educational goal and have financial need. The actual amount of the grant award will depend on the availability of funds and the degree of financial need. Grants are awarded on a first-come, first-served basis. Students must apply each academic year for the TPEG.

Scholarships

DCCCD Foundation Scholarships

The DCCCD Foundation provides a scholarship program for students who attend the colleges of the DCCCD. These funds are made available through the colleges to eligible students who also meet additional criteria of the scholarship funds. Information and application forms are available in the Financial Aid Office of each College.

Miscellaneous Scholarships

Several of the colleges have a limited number of scholarships available as a result of gifts from individuals, private industry, and community organizations. Generally, the eligibility criteria are the same as noted for the DCCCD Foundation Scholarships, and application forms are available in the Financial Aid Office of each College.

Loans

Federal Stafford Loans

The Department of Education provides loans from private commercial lending agencies such as banks, savings and loan associations, credit unions, and insurance companies. To be eligible, students must demonstrate financial need, make satisfactory academic progress toward their educational goal, be enrolled for at least six (6) credit hours and attend a loan entrance counseling session.

The interest rate is variable with a maximum of 9%. Borrowers do not pay interest until six months after ceasing at least half-time enrollment. The U.S. Dept. of Education pays the interest during the time the student is enrolled and during the grace period of six months following enrollment. Repayment begins six months after the student leaves school or drops below half-time enrollment. Lenders will charge a loan origination fee on each loan in addition to the insurance premium charged on the loan. These charges will be deducted from the proceeds of the loan.

Due to high default rates, some colleges delay certification of loans and checks arrive mid-semester.

Federal Unsubsidized Stafford Loans

The Federal Unsubsidized Stafford Loan is available for all students regardless of income. Interest payments begin the day the loan is disbursed and the student is responsible for interest accrued during in-school and deferment periods. Repayment of principle begins 6 months after the student drops below half-time enrollment.

Federal Parent Loan for Undergraduate Students (FPLUS)

Under the Federal Parent Loan for Undergraduate Students, parents may borrow up to the cost of education, less other aid, per year for each dependent undergraduate student. The interest rate is variable with a cap of 10%. Repayment of principle and interest begins within 60 days after disbursement of the loan. The parent's credit rating will be checked to determine eligibility and disbursement checks will be made co-payable to the parent and the institution.

Hinson-Hazlewood College Student Loan Program (HHCSLP)

The Hinson-Hazlewood Loan is a state-funded Federal Stafford Student Loan Program for students who are attending Texas colleges and are eligible to pay Texas resident tuition rates. All Hinson-Hazlewood Loan applicants must demonstrate financial need before a loan can be approved. The loan limit is $2,625 for the first year and $3,500 for the second year of undergraduate study and a maximum of $23,000 for all years of undergraduate study. The actual loan amount may be limited to less than this depending on the cost of attendance, other financial aid, and the family's financial condition.

A loan origination fee and an insurance premium on the life of the student will be taken from the total amount of each loan. The student pays no interest or payments while enrolled at half time or during the six-month grace period. The interest rate will be variable and will be disclosed by the
Coordinating Board at time of disbursement. The minimum payment will be $50 per month over a 5-to 10-year period depending on the total amount borrowed. Participation in this loan program is on an individual college basis.

Emergency Short-Term Loans
The colleges of the DCCCD have limited short-term loan funds available that have been established by individuals and organizations, including the DCCCD Foundation, to meet emergency needs of students. Loans are usually limited in amount and bear no interest. These loans must be repaid within 60 days of the date of the loan, or the end of the term, whichever date comes first. A late fee of $10 and collection costs will be added for payments made after the due date. Students must not have any outstanding debts with the DCCCD to receive these funds.

Employment

Federal Work-Study Program (FWSP)
The Federal Work-Study Program provides part-time employment for students with financial need who are making satisfactory academic progress toward their educational goal. Most students work 15 to 20 hours per week. The amount students can earn in a school year is determined by the amount of their financial need and other aid awarded as part of their financial aid package. The majority of the students are employed on campus; however, some off-campus community service positions are also available. Students must apply each academic year for Federal Work-Study.

Student Assistants Employment Program (Non-Work Study)
Part-time employment for students who do not demonstrate financial need is available on campus. The wage rate and the average hours worked per week are the same as the Federal Work-Study Program.

Tuition Exemption Programs
The State of Texas and DCCCD offer a number of exemptions from tuition and fee charges. These exemptions are often overlooked simply because of their unusual nature. They are not related to family income or “financial need”, nor do they require completion of a regular financial aid application. The Texas Higher Education Coordinating Board (512-427-6340) has information concerning tuition exemption programs and the criteria for eligibility. The exemptions are listed below:
- Veterans and Dependents (Hazlewood Act)
- Highest Ranking High School Graduate
- American (Other than US) Hemisphere Student
- Blind or Deaf Student
- Children of Disabled Fireman and Peace Officers
- Children of Prisoners of War or Persons Missing in Action
- Fire Fighters Enrolled in Fire Science Courses
- Foster Care Students
- Senior Citizens
- AFDC Students
- ROTC/National Guard Students
- Early High School Graduation

Vocational Rehabilitation
The Texas Rehabilitation Commission offers assistance for tuition and fees to students who are vocationally challenged as a result of a physically or mentally disabling condition. This assistance is generally limited to students.

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**FEDERAL STAFFORD LOAN
SAMPLE REPAYMENT SCHEDULE**

The chart below shows estimated monthly payments and total interest charges for 9% loans of varying amounts, with typical repayment periods. Remember that 9% is the highest the interest rate can be. Your rate may be lower.

**Typical Repayment Plans**

<table>
<thead>
<tr>
<th>Total Loan Amount</th>
<th>Number of Payments</th>
<th>Monthly Interest Payment</th>
<th>Total Charges</th>
<th>Repaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,600</td>
<td>66</td>
<td>$50.00</td>
<td>$707.65</td>
<td>$3,307.65</td>
</tr>
<tr>
<td>4,000</td>
<td>120</td>
<td>50.67</td>
<td>2,080.44</td>
<td>6,080.44</td>
</tr>
<tr>
<td>7,500</td>
<td>120</td>
<td>95.01</td>
<td>3,900.82</td>
<td>11,400.82</td>
</tr>
<tr>
<td>10,000</td>
<td>120</td>
<td>126.68</td>
<td>5,201.09</td>
<td>15,201.09</td>
</tr>
<tr>
<td>15,000</td>
<td>120</td>
<td>190.01</td>
<td>7,801.64</td>
<td>22,801.64</td>
</tr>
</tbody>
</table>
not receiving other types of aid. For information, contact the Texas Rehabilitation Commission, (817) 467-8400, FAX (817) 467-8449.

Bureau of Indian Affairs
The Bureau of Indian Affairs offers educational benefits to American Indian/Native American students. Students need to contact the regional Bureau of Indian Affairs Office regarding eligibility.
Oklahoma Area Education Office
4149 Highline Blvd., Ste. 380
Oklahoma City, OK 73108
(405) 945-6051 or 6052

Veteran's Benefits Programs
The Veteran's Benefits Programs are coordinated by the Veteran's Affairs Office of the college. The function of the Veteran's Affairs Office is to assist students with the completion of proper forms and coordinate the certification procedures for monthly benefits. The office may also counsel veterans concerning VA educational benefits, and if possible, other areas related to the veteran's general welfare, counsel students concerning the enrollment procedures at the college, arrange for tutoring services, and administer the Veteran's Work-Study Program on campus.

Standards of Progress For Veterans
Acceptable scholastic performance is the maintenance of a grade point average, based on GPA (1), of 2.0 or better. Students who earn a cumulative grade point average of less than 2.0 will be placed on probation. Once on probation, failure to obtain a 2.0 grade point average will result in suspension of benefits. Once suspended, the veteran must obtain a 2.0 cumulative grade point average to re-establish eligibility. The student must receive academic advisement concerning his/her suspension and receive permission to enroll for classes from a suspension academic advisor. An explanation of how grades are interpreted, how grade points are determined, and how a grade point average is calculated can be found in this catalog.

Guidelines For Veterans
The veteran student should be aware of regulations enforced by the Department of Veterans Affairs:
1. A veteran may be required to pay back portions of the benefits received, if they drop a course or in some other way receive a non-punitive "W" grade.
2. A veteran student who withdraws from all courses attempted during a semester is considered as making unsatisfactory progress by the VA and may lose future benefits.

3. A veteran student who plans to enroll in developmental courses must first take an Assessment Test at the college and show a need in basic skills before enrolling in these courses.
4. A veteran student can be certified for a TV class or classes without taking any other courses.
5. A veteran student must enroll in courses required by his/her Educational Degree Plan. A veteran will not receive payment of benefits for courses not required by this plan. Violation of these regulations can cause complications in receiving monthly educational benefits or loss of those benefits. The above VA regulations are subject to change without notice. Students should contact the Veterans Affairs Office in order to be aware of current regulations and procedures. Questions concerning amounts of educational assistance a veteran may be eligible for and other financial related questions should be referred to the Department of Veterans Affairs, Regional Office at 1 (800) 827-1000.

Hazlewood Act
Under the Hazlewood Act, certain Texas veterans who have exhausted remaining educational benefits from the Department of Veterans Affairs can attend Texas state supported institutions and have tuition and some fees waived. To be eligible, students must have been residents of Texas at the time they entered the service, have an honorable discharge, must now be residents of Texas, be ineligible for federal financial aid grants, and not be in default on any federal educational loans. Beginning with Fall, 1995, a person may receive benefit under the Act for a maximum of 150 credit hours. Classes taken or attempted prior to the 1995 fall semester are not counted towards this limit. This limit is on hours attempted, not hours completed. To apply, students must submit a copy of their discharge papers, a letter from the Department of Veterans Affairs stating ineligibility for VA educational benefits, a Hazlewood Act application, a bill for tuition and fees, and proof that the student is not eligible for federal financial aid grants.
In most instances, proof of ineligibility for federal financial aid grants will require the submission of a Student Aid Report. A student must apply for financial aid in order to receive a Student Aid Report.

Academic Progress Requirements
To comply with applicable laws and accreditation standards, the Dallas County Community College District has developed a policy describing satisfactory progress for both applicants and recipients of student financial aid.
STUDENT FINANCIAL AID STANDARDS OF ACADEMIC PROGRESS

I. Purpose and Scope
The following Standards of Academic Progress are effective beginning with the Spring, 2000 semester grades and are adopted according to federal mandates for the purpose of determining continuing student eligibility for financial aid. These Standards shall apply to all need-based financial assistance, unless the terms of a particular grant provide otherwise.

II. Grade Point Average (GPA) Requirement
A. Continuing students applying for financial assistance must have a 2.0 cumulative GPA on all credit hours earned from District colleges prior to the semester for which aid is requested.
B. Each fall and spring semester students must complete the minimum numbers of hours from those attempted with a 2.0 Cumulative GPA. The following chart states the minimums that all Financial Aid Students must meet:

<table>
<thead>
<tr>
<th>SEMESTER REQUIREMENTS</th>
<th>CUMULATIVE GPA (CGPA) REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Attempted</td>
<td>Hours Required to Complete with a Passing Grade</td>
</tr>
<tr>
<td>12 or more</td>
<td>9</td>
</tr>
<tr>
<td>6 to 11</td>
<td>6</td>
</tr>
<tr>
<td>5 or less</td>
<td>All</td>
</tr>
</tbody>
</table>

III. Failure to Meet the Standards of Academic Progress
In these provisions, probation or suspension refers only to financial aid probation or suspension.
A. Following the first semester in which the above standards of academic progress are not met, the student will be placed on probation for the next semester of funding.
B. The student may be allowed to receive financial aid funds while on probation, but must complete the subsequent term by meeting all of the minimum requirements at the close of that term.
C. 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. The student will be responsible for paying for tuition, and any related institutional charges already applied to the student's account, including, but not limited to, any financial aid checks already released to the student.
D. During the suspension period, the student must enroll at a DCCCD college for a minimum of six (6 credit hours) during a Fall or Spring semester, pay the expenses related to that enrollment, and complete all courses attempted with a GPA of 2.0 or better.
E. Students who have been reinstated from any suspension status may continue only on a probationary status for at least one term, regardless of their CGPA at the time of reinstatement.
F. Students placed on probation or suspension will be notified in writing of their status at the end of the semester.
G. If failure to meet Satisfactory Progress results in a third suspension from Financial Aid, no additional aid will be awarded.

IV. Appeal Process
A student who has been denied financial aid because of a failure to meet any of the criteria of the standards may petition the Financial Aid Office to consider any mitigating circumstances. The student's appeal must be in writing and supporting documentation regarding special circumstances must be provided. Should the Director deny a reinstatement of aid, the student may appeal the Director's decision by following the same procedure of written appeal to the appropriate vice president overseeing the aid office.

V. Maximum Time Allowed for Completion of Educational Objectives
All financial aid recipients will have a maximum of 90 attempted hours to complete their educational requirements of 90 credit hours.
VI. Additional Information

A. Financial Aid will not be provided for:
   • courses taken by audit;
   • credit hours earned by placement tests;
   • non-credit coursework;
   • any course registered for the Fall 2000 term after September 1, 2000 and any course registered for the Spring 2001 term after January 19, 2001 (i.e., flex entry, fast track, mini term courses);
   • transfer students attending for summer only.

B. Grades of “W”, “WX”, “E” or “I” will be counted towards hours attempted but will not be treated as completed coursework.

C. For the purpose of financial aid eligibility only, a course resulting in a grade of “F” will be counted towards hours attempted but will not be considered a completed course. When calculating the financial aid cumulative grade point average (CGPA), the value of the “F” will be equal to “0.” Thus, it will negatively affect the financial aid CGPA.

D. Developmental remedial coursework may receive funding up to a maximum of “27 credit hours” according to Federal Regulations.

E. Many support services are available at each District college to help students achieve academic success. The services include Counseling, Testing, Tutoring, Health Services, Placement, the Career Development Center, and the Learning Resource Center. Information on such services is available at www.dcccd.edu or at each college.

F. If you withdraw from ALL of your fall classes before October 30, 2000 or spring classes before March 31, 2001, you will be required to repay a portion of your federal grants.
STUDENT CODE OF CONDUCT

Educational opportunities are offered by the Dallas County Community College District without regard to race, color, age, national origin, religion, sex or disability.

PURPOSE

The purpose of Policies about student conduct and discipline are to provide guidelines for the educational environment of the District. This environment views students in a holistic manner, encouraging and involving them to learn and grow independently. Such an environment presupposes both rights and responsibilities. Free inquiry and expression are essential parts of this freedom to learn, to grow and to develop. However, this environment also demands appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students must exercise these freedoms with responsibility.

POLICIES, RULES, AND REGULATIONS

Interpretation of Regulations: Disciplinary regulations at the college are set forth in writing in order to give students general notice of prohibited conduct. The regulations should be read broadly and are not designed to define misconduct in exhaustive terms.

Inherent Authority: The college reserves the right to take necessary and appropriate action to protect the safety and well-being of the campus community.

Student Participation: Students are asked to assume positions of responsibility in the college judicial system in order that they might contribute their skills and insights to the resolution of disciplinary cases. Final authority in disciplinary matters, however, is vested in the college administration and in the Board of Trustees.

Standards of Due Process: Students who allegedly violate District policy are entitled to fair and equitable proceedings. The focus of inquiry in disciplinary proceedings shall be the guilt or innocence of those accused of violating disciplinary regulations. Formal rules of evidence shall not be applicable, nor shall deviations from prescribed procedures necessarily invalidate a decision or proceeding, unless significant prejudice to a student respondent or the college may result.

Accountability: Students may be accountable to both civil authorities and to the college for acts which constitute violations of law and this code. Disciplinary action at the college will normally proceed during the pendency of criminal proceedings and will not be subject to challenge on the ground that criminal charges involving the same incident have been dismissed or reduced.

DEFINITIONS

Definitions to be used in this policy are as follows:

1. ADesignated administrator@ shall mean an administrator or the officer or officers directly responsible for student affairs in the District.

2. AStudent shall mean one who is currently enrolled in the District. These policies and regulations shall also apply to any prospective or former student who has been accepted for admission or readmission to any component institution while he or she is on the campus of any component institution.

3. ACollege-sponsored activity@ means any activity on or off campus which is initiated, aided, authorized, or supervised by the college.

4. ACollege@ or Ainstitution@ means the colleges of the Dallas County Community College District, including the Bill J. Priest Institute of Economic Development.

5. ACollege premises@ means buildings or grounds owned, leased, operated, controlled, or supervised by the college.

6. APublished college regulation or policy@ means standards of conduct or requirements located in the: a. College catalog.

b. Board of Trustees policies and administrative procedures manual.
c. Student handbook.
d. Any other official publication.

BILL J. PRIEST INSTITUTE FOR ECONOMIC DEVELOPMENT

The Provost of the Bill J. Priest Institute for Economic Development and College President are authorized to promulgate written regulations which apply only to students who are subject to provisions of the federal Job Training Partnership Act (JTPA), as amended, its regulations, and other similar federal programs. JTC or College regulations should be designed to foster good work habits, promote skills desired by local employers, and encourage success in obtaining and maintaining a job. JTPA students are subject to conduct standards in the code of student conduct as well as JTC or College regulations; however, the remainder of the code is not applicable to such students. A JTPA student who allegedly violates the code and/or JTC or College regulations must be given an opportunity to appeal expulsion, suspension, or other disciplinary sanctions in a manner determined by the Provost or College President. JTPA students may file grievances with the private industry council only.

RESPONSIBILITY

Each student shall be charged with notice and knowledge of the contents and provisions of the District’s policies, procedures, and regulations concerning student conduct.

All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. In addition to activities prohibited by law, the following types of behavior shall be prohibited:

1. Intentionally causing physical harm to any person on college premises or at college-sponsored activities, or intentionally or recklessly causing reasonable apprehension of such harm or hazing.

2. Unauthorized use, possession, or storage of any weapon on college premises or at college-sponsored activities.

3. Intentionally initiating or causing to be initiated any false report, warning, or threat of fire, explosion, or other emergency on college premises or at college-sponsored activities.

4. Intentionally interfering with normal college or college-sponsored activities, including but not limited to, studying, teaching, research, college administration, or fire, security, or emergency services.

5. Knowingly violating the terms of any disciplinary sanction imposed in accordance with District policies, regulations, and procedures.

6. Unauthorized distribution or possession for purposes of distribution of any controlled substance or illegal drug on college premises or at college-sponsored activities.

7. Intentionally or maliciously furnishing false information to the college.

8. Sexual harassment.

9. Forgery, unauthorized alteration, or unauthorized use of any college document or instrument of identification.

10. Unauthorized use of computer hardware or software.

11. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion.

ACheating on a test shall include:

a. Copying from another student=s test paper.
b. Using test materials not authorized by the person administering the test.
c. All forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.
d. Collaborating with or seeking aid from another student during a test without permission from the test administrator.
e. Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
f. The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
g. Substituting for another student, or permitting another student to substitute for one=s self, to take a test.
h. Bribing another person to obtain an unadministered test or information about an unadministered test.

APlagiarism@ shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another=s work and the unacknowledged submission or incorporation of it in one=s own written work.

ACollusion@ shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.

1. Intentionally and substantially interfering with the freedom of expression of others on college premises or at college-sponsored activities.

2. Theft of property or of services on college premises or at college-sponsored activities; having possession of stolen property on college premises or at college-sponsored activities.
3. Intentionally destroying or damaging college property or property of others on college premises or at college-sponsored activities.

4. Failure to comply with the direction of college officials, including campus security/safety officers, acting in performance of their duties.

5. Violation of published college regulations or policies. Such regulations or policies may include those relating to entry and use of college facilities, use of vehicles and media equipment, campus demonstrations, misuse of identification cards, and smoking.

6. Use or possession of any controlled substance or illegal drug on college premises or at college-sponsored activities.

7. Unauthorized presence on or use of college premises.

8. Nonpayment or failure to pay any debt owed to the college with intent to defraud.

9. Use or possession of an alcoholic beverage on college premises with the exception of:
   a. specific beverage-related courses with the El Centro food service program, or
   b. a course that requires the use of alcohol and is approved by the Texas Commission on Law Enforcement Officers= Standards and Education.

DISCIPLINE

Any student violating this policy shall be subject to disciplinary sanctions including suspension, in accordance with The Student Code of Conduct. A violation of this code may result in expulsion, suspension, or other appropriate actions.

Sanctions for violations of prohibited conduct for (1) through (6) may result in expulsion, for (7) through (20) may result in a warning, suspension, or other appropriate actions.

Repeated or aggravated violations of any provision of this code may also result in suspension or expulsion or in the imposition of such lesser penalties as are appropriate.

Aggravated violation means a violation which resulted or foreseeable could have resulted in significant damage to persons or property or which otherwise posed a substantial threat to the stability and continuance of normal college or college-sponsored activities.

DISCIPLINARY PROCEEDINGS

When the Vice President of Student Development (VPSD) or officer directly responsible for student affairs or discipline receives information that a student has allegedly violated a published college regulation or policy, the VPSD or designee shall investigate the alleged violation. After completing the preliminary investigation, the VPSD may:

1. Dismiss the allegation as unfounded, either before or after conferring with the student; or

2. Proceed administratively and impose disciplinary action; or

3. Prepare a complaint based on the alleged violation for use in disciplinary hearings along with a list of witnesses and documentary evidence supporting the allegation.

The VPSD will notify the complainant of the disposition of the complaint. If the VPSD dismisses the allegation, the complainant may appeal to the President for review in writing within five (5) working days after disposition.

The President or a designee may suspend a student immediately and without prior notice for an interim period pending disciplinary proceedings, when there is evidence that the continued presence of the student on college premises poses a substantial threat to himself or herself, to others, or to the stability and continuance of normal college functions. A student who is suspended on an interim basis shall be given an opportunity to appear before the President or a designee within five (5) working days from the effective date of the interim suspension. A hearing with the President shall be limited to the following issues only:

1. The reliability of the information concerning the student's conduct, including the matter of his or her identity; and

2. Whether the conduct and surrounding circumstances reasonably indicate that the student's continued presence on college premises poses a substantial threat to himself or herself, to others or to the stability and continuance of normal college functions.

After the hearing, the President or designee may modify the interim suspension as reasonable to protect the student, public, and college.

No person shall search a student's personal possessions for the purposes of enforcing this code unless the student's prior permission has been obtained or unless a law enforcement officer conducts the search as authorized by law.

SUMMONS

The VPSD shall summon a student regarding an alleged violation of this code by sending the student a letter. The letter shall be sent by certified mail, return receipt requested, addressed to the student at his or her last known address as it appears in the records of the Registrar's Office or shall be delivered personally to the student.

The letter shall direct a student to appear at a specific time and place not less than five (5) working days after the date of the letter. The letter shall describe briefly the alleged violation and cite the published college regulation or policy which allegedly has been violated.

The VPSD has authority to place a student on disciplinary probation if the student fails, without good cause, to comply with a letter of summons, or to apply sanctions against the student as provided in this code.

DISPOSITION

At a conference with a student in connection with an alleged violation of this code, the VPSD shall provide the student with a copy of this code and discuss administrative disposition of the alleged violation.

1. If a student accepts the administrative disposition, the student shall sign a statement that he or she understands the charges, his or her right to a hearing or to waive same, the penalty or penalties imposed, and that he or she waives the right to appeal. The student shall return the signed form by 5:00 p.m. of the day following administrative disposition.

2. If a student refuses administrative disposition of the alleged violation, the student is entitled to a hearing as provided herein. The VPSD shall note the date of refusal in writing and the student shall acknowledge in writing such date.

3. The hearing shall be conducted by the Student Discipline Committee.

4. The VPSD shall prepare an accurate, written summary of each administrative disposition and send a copy to the student (and, if the student is a minor, to the parent or guardian of the student), to the Director of Campus Security, to the complainant, and to other appropriate officials.

HEARING COMMITTEE

When a student refuses administrative disposition of a violation, the student is entitled to a hearing before the Student Discipline Committee. The hearing request must be made to the VPSD (or officer directly responsible for student affairs or discipline) in writing, on or before the sixtieth (60th) working day after the date of the administrative disposition. The committee shall be composed of equal number of students, administrators and faculty of the college. The committee and its chair shall be appointed by the President for each hearing on a rotating basis or on the basis of availability. The committee chair will be selected from the administration or faculty.

The chairman of the committee shall rule on the admissibility of evidence, motions, and objections to procedure, but a majority of the committee members may override the chairman's ruling. All members of the committee are expected to attend all meetings and are eligible to vote in the hearing.

The chairman shall set the date, time, and place for the hearing and may summon witnesses and require the production of documentary and other evidence.

The VPSD shall represent the college before the Student Discipline Committee and present evidence to support any allegations of violations.
NOTICE

The committee chairman shall notify the student of the date, time, and place for the hearing by sending the student a letter by certified mail, return receipt requested, addressed to the student at his or her address appearing in the Registrar’s Office records. The letter shall specify a hearing date not less than five (5) nor more than ten (10) working days after date of the letter. If a student is under 18 years of age, a copy of the letter shall be sent to the parents or guardian of the student. The chairman may for good cause postpone the hearing as long as all interested parties are notified of the new hearing date, time, and place.

CONTENT OF NOTICE

The notice shall advise the student of the following rights:

1. To appear alone or with legal counsel if the alleged violation subjects the student to expulsion or suspension. The role of legal counsel is limited as provided in the code;
2. To have a parent or legal guardian present at the hearing;
3. To know the identity of each witness who will testify;
4. To cause the committee to summon witnesses, and to require the production of documentary and other evidence possessed by the College;
5. To cross-examine each witness who testifies.

FAILURE TO COMPLY WITH NOTICE

A student who fails to appear after proper notice and without good cause will be deemed to have pleaded guilty to the violation pending against the student. The committee shall impose appropriate penalty and notify the student in the same manner as the notice of hearing.

ROLE OF LEGAL COUNSEL

Legal counsel who represents a student in a hearing where the alleged violation subjects the student to expulsion or suspension is limited to advising and assisting the student. This limitation means that legal counsel shall not cross-examine witnesses, make objections, testify, or perform other similar functions generally associated with legal representation. The same preceding limitation applies to counsel who represents the college. Student representation by legal counsel is not permitted in a hearing where the alleged violation does not subject the student to expulsion or suspension.

PRELIMINARY MATTERS

Charges arising out of a single transaction or occurrence, against one or more students, may be heard together, or, upon request by one of the students-in-interest, separate hearings may be held.

There will be disclosure of all evidence to both sides prior to the hearing.

At least by 12:00 noon, five (5) full working days before the hearing date, the student concerned shall furnish the committee chairman with:

1. The name of each witness he or she wants summoned and a description of all documentary and other evidence possessed by the college which he or she wants produced.
2. An objection that, if sustained by the chairman of the Student Disciplinary Committee, would prevent the hearing.
3. The name of the legal counsel, if any, who will appear with the student.
4. A request for a separate hearing, if any, and the grounds for such a request.

HEARING PROCEDURE

The hearing shall be conducted by the chairman who shall provide opportunities for witnesses to be heard. The college will be represented by legal counsel if the student is represented by legal counsel in a hearing where the student is subject to expulsion or suspension.

If a hearing may result in expulsion or suspension of a student, the college will have a court reporter present to transcribe the proceedings. If a hearing will not result in expulsion or suspension of a student, legal representation is not permitted and recording of the hearing by any means is not permitted unless authorized by law.

If the hearing is a private hearing, the committee shall proceed generally as follows:

1. Persons present shall be the complainant, the VPSD, and the student - with a parent or guardian if desired.
2. Before the hearing begins, the VPSD or the student may request that witnesses remain outside the hearing room.
3. The VPSD shall read the complaint.
4. The VPSD shall inform the student of his or her rights, as stated in the notice of hearing.
5. The VPSD shall present the college’s case.
6. The student may present his or her defense.
7. The VPSD and the student may present rebuttal evidence and argument.
8. The committee, by majority vote, shall determine the guilt or innocence of the student regarding the alleged violation.
9. The committee shall state in writing each finding of a violation of a published college regulation or policy. Each committee member concurring in the finding shall sign the statement. The committee may include in the statement its reasons for the finding. The committee shall notify the student in the same manner as the notice of hearing.

A determination of guilt shall be followed by a supplemental proceeding in which either party may submit evidence or make statements to the committee concerning the appropriate penalty to be imposed. The past disciplinary record of a student shall not be submitted to the committee prior to the supplemental proceeding. The committee shall determine a penalty by majority vote and shall inform the student, in writing, of its decision as in 9 above.

EVIDENCE

Legal rules of evidence shall not apply to hearings under this code. Evidence that is commonly accepted by reasonable persons in the conduct of their affairs is admissible. Irrelevant, immaterial, and unduly repetitious evidence may be excluded.

The committee shall recognize as privileged communications between a student and a member of the professional staff of the Health Center.
Counseling or Guidance Center where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff member and the student to be confidential. Committee members may freely question witnesses.

The committee shall presume a student innocent of the alleged violation until there is a preponderance of evidence, presented by the VPSD, that the student violated a published college regulation or policy.

All evidence shall be offered to the committee during the hearing.

A student defendant may choose not to testify against himself or herself. The committee will make a determination based on the evidence presented.

RECORD

The hearing record shall include: a copy of the notice of hearing; all documentary and other evidence offered or admitted in evidence; written motions, pleas, and other materials considered by the committee; and the committee's decisions.

PETITION FOR ADMINISTRATIVE REVIEW

A student is entitled to appeal in writing to the President who may alter, modify, or rescind the finding of the committee and/or the penalty imposed by the committee. A student is ineligible to appeal if the penalty imposed is less than suspension or expulsion. The President shall automatically review every penalty of expulsion. Sanctions will not be imposed while appeal is pending.

A student is entitled to appeal in writing to the Board through the President, the Chancellor, and the Chairman of the Board. An appeal from the Student Discipline Committee is by review of the record (not de novo).

A petition for review is informal but shall contain, in addition to the information required, the date of the Student Discipline Committee's action and the student's reasons for disputing with the committee's action. A student shall file his or her petition with the President on or before the third working day after the day the Disciplinary committee determines the penalty. If the President rejects the petition, and the student wishes to petition the Chancellor, he or she shall file the petition with the Chancellor on or before the third working day after the President rejects the petition in writing. If the Chancellor rejects the petition, the student appellant shall file the petition with the Board of Trustees, and the student shall file the petition with the Board of Trustees, he or she shall file the petition with the Chairman of the Board on or before the third working day after the day the Chancellor rejects the petition in writing.

The President, the Chancellor, and the Board in their review may take any action that the Student Discipline Committee is authorized to take; however, none may increase the penalty. They may receive written briefs and hear oral argument during their review.

The President, the Chancellor, and Board of Trustees shall modify or set aside the finding of violation, penalty, or both, if the student was prejudiced because of the Student Discipline Committee's finding of facts, conclusions or decisions were:

1. In violation of federal or state law or published college regulation or policy;
2. Clearly erroneous in view of the reliable evidence and the preponderance of the evidence;
3. Capricious, or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

AUTHORIZED DISCIPLINARY PENALTIES

The VPSD (or office directly responsible for student affairs or discipline) or the student discipline committee may impose one or more of the following penalties for violation of a Board policy, college regulation, or administrative rule:

1. An "admonition" means a written reprimand from the VPSD to the student on whom it is imposed.
2. "Warning probation" means further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students may be placed on disciplinary probation in any combination illustrated by, but not limited to, the following: being intoxicated; misuse of I.D. card, creating a disturbance in or on college premises, and gambling.
3. "Disciplinary probation" means further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students may be placed on disciplinary probation in any combination illustrated by, but not limited to, the following: being intoxicated; misuse of I.D. card, creating a disturbance in or on college premises, and gambling.

4. "Withholding of transcript or degree" may be imposed upon a student who fails to pay a debt owed the college or who has a disciplinary case pending final disposition or who violates the oath of residency. The penalty terminates on payment of the debt or the final disposition of the case or payment of proper tuition.
5. "Bar against readmission" may be imposed upon a student who has left the college or entered withdrawal for disciplinary reasons.
6. "Restitution" means reimbursement for damages to or misappropriation of property. Restitution may take the form of appropriate service to repair or otherwise compensate for damages.
7. "Suspension of rights and privileges" is an elastic penalty which may impose limitations or restrictions to fit the particular case.
8. "Suspension of eligibility for official athletic and nonathletic extracurricular activities" or organization; taking part in a registered student organization's activities; or attending its meetings or functions; and from participating in an official athletic or nonathletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. Students may be placed on disciplinary suspension for engaging in activities as illustrated by, but not limited to, the following: having intoxicating beverages in any college facility, with the exception of specific beverage-related courses within the El Centro food service program; destroying property or student's personal property; giving false information in response to requests from the college; instigating a disturbance or riot; stealing, possession, use, sale, or purchase of illegal drugs on or off campus; any attempt at bodily harm, which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a misdemeanor or felony under state or federal law.
9. "Denial of degree" may be imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time up to and including permanent denial.
10. "Suspension from the college" prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering the college campus except in response to an official summons; and from registering, either for credit or for noncredit, for scholastic work at or through the college.
11. "Expulsion" is permanent severance from the college.

A sanction imposed at one college shall apply to all colleges of the College District.

HAZING

1. Personal Hazing Offense
A person commits an offense if the person:

a. engages in hazing;
b. solicits, encourages, directs, aids, or attempts to aid another person in engaging in hazing;
c. intentionally, knowingly, or recklessly permits hazing to occur; or
d. has firsthand knowledge of the planning of a specific hazing incident involving a student in an educational institution, or firsthand knowledge that a specific hazing incident has occurred, and knowingly fails to report said knowledge in writing to the VPSD or other appropriate official of the institution.

2. Definition
"Hazing" means any intentional, knowing, or reckless act, occurring on or off the college campus, by an employee, officer, member of an educational institution, by one person alone or acting with others, directed against a student that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in any organization whose members are or include students at an educational institution. The term includes but not limited to:

a. any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity;
b. any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small place, calisthenics, or any activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.
c. any activity involving consumption of a food, liquid, alcoholic beverages, liquor, drug, or any other substance which subjects
the student to an unreasonable risk of harm or which adversely affects the mental or physical health or safety of the student;

d. any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame, or humiliation, or that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered on an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to actions described in the subsection;

e. any activity that induces, causes, or requires the student to perform a duty or task which involves a violation of the Penal Code.

STUDENT GRIEVANCE PROCEDURE

DEFINITION

A student grievance is a College-related problem or condition which a student believes to be unfair, inequitable, discriminatory, or a hindrance to the educational process. A grievance also includes discrimination on the basis of race, color, religion, national origin, sex, disability of age.

SCOPE

The student grievance procedure is not intended to supplant the Student Code of Conduct, which allows the student procedural due process in disciplinary proceedings initiated by the College. This student grievance procedure is designed to provide the student with the opportunity to file a grievance, as defined above, and to provide a process for resolution of the grievance. This student grievance procedure is not designed to include changes in policy nor does it apply to grading practices. Recommendations for initiating new policy or changing established policy are handled through normal administrative channels. Problems with grades will be dealt with first by the instructor, and then by the division dean. If a student is not satisfied, the student may appeal the decision, in writing, to the appropriate vice-president. If still not satisfied, the student may pursue the appeal to the College President whose decision is final.

SEXUAL HARASSMENT

The student grievance procedure is not applicable to complaints of sexual harassment. All students shall report complaints of sexual harassment informally to location Human Resources personnel or location representatives selected by the highest level administrator at the location or formally to the Vice-Chancellor of Educational Affairs as provided in the sexual harassment procedure.

INFORMAL PROCEDURES

Students who wish to file a College-related grievance should, but are not required to discuss it with the College employee most directly responsible for the condition which brought about the alleged grievance. If the grievance is not resolved to the student’s satisfaction, the student may appeal to the next level of authority. The student may consult with the administrative offices to determine the next level of authority. If an appeal does not resolve the grievance, the student may proceed to the appropriate vice-president with a written presentation of the grievance. If the vice-presidential level of appeal does not prove satisfactory to the student, the student may seek review under the formal procedures below.

OTHER PROCEDURAL MATTERS

If a student files a grievance informally by discussing it with the college employee most directly responsible, etc., the following procedures apply. The student shall discuss the grievance fully at each level in the procedure. At each level of authority, a decision shall be made based on common sense and good judgment of a reasonable person. Each level may seek the appropriate authority, if necessary, to resolve the grievance. The entire informal procedure should take no longer than 30 days.

FORMAL PROCEDURES

Procedures for appeals are as follows:

A student who wishes a grievance to be heard by an appeal committee must submit a request in writing to the vice-president of student development (VPSD) or employee who is responsible for student development.

1. The VPSD or responsible employee will convene and chair the appeal committee.

2. The appeal must be heard by the committee within ten class days of the request unless extended with the agreement of both the student and the VPSD or responsible employee.

3. The committee will be ad hoc and will consist of two students, two faculty members, and one staff member who is either an administrator or a noncontractual employee. It is the responsibility of the College President or designee to appoint all committee members and the appointor shall examine each member to ensure their impartiality.

4. The appeal committee will make findings and send its decision to the College President. A grievant may seek review of an adverse decision through the President. The decision of the President shall be final.

BOARD ACTION

By law, the Board of Trustees is not required to take any action concerning a grievance, but is required to listen if the grievance is presented at a public meeting.

APPEAL COMMITTEE PROCEDURES

1. If a student requests a hearing by an appeal committee, a grievance must be in writing and contain:

   a. the student’s name and address;
   b. the nature of the grievance, including the date it occurred;
   c. the corrective action sought;
   d. any other relevant information.

2. A grievance filed, either informally or formally, will not be considered unless it is filed not later than 120 days after the event or occurrence giving rise to the grievance or knowledge of the event or occurrence. The entire formal procedure should take no longer than 30 days.

3. In conducting the appeal committee hearing, the VPSD or responsible employee is authorized to:

   a. require any student or employee to provide a written statement along with any documents concerning the events and circumstances that may have given rise to the grievance;
   b. require any student or employee to appear and testify;
   c. question each individual who testifies; and
   d. copy all documents.

   This is not an adversarial proceeding. A VPSD or responsible employee shall conduct a hearing in a professional and cooperative manner and all participants are expected to do likewise.

4. Failure to comply with a summons or order from the VPSD or responsible person may result in disciplinary action.

5. The appeal committee shall base its decisions during a hearing and make a recommendation upon the common sense and good judgement of a reasonable person.

6. The VPSD or responsible employee shall ensure that all relevant evidence is obtained from parties during the hearing.

7. An attorney or other representative of a grievant may present a grievance to the appeal committee, but this presentation does not include questioning or cross-examining witness (including the grievant), objecting to testimony or documents, or similar actions undertaken by an attorney to represent a client.

COORDINATORS

Coordinator(s) for the Rehabilitation Act of 1973 (Section 504), Americans with Disabilities Act of 1990 (Title II) and Education Amendments of 1972 (Title IX)

Cedar Valley College
Claire Gauntlett - Dean of Institution Effectiveness & Research
Section 504, Title II, and Title IX Coordinator

Brookhaven College
Maxine Rodgers - Vice President of Business Services
Section 504 and Title II Coordinator

Lynn Levesque - Athletic Director
Title IX Coordinator
Purpose of Computer Use Policy

The District is committed to providing an educational and work climate that is conducive to the personal and professional development of each individual. To fulfill its multiple missions as an institution of higher learning, the District encourages a climate that values intellectual diversity, pluralism and the uniqueness of the individual within our state, nation and world. The District also strives to protect the rights and to enhance the self-esteem of all of its members. Faculty, staff and students should be aware that any form of illegal harassment or discrimination against any individual is inconsistent with the values and ideals of our community.

As an institution of higher education, the District encourages, supports, and protects First Amendment rights and an open environment to pursue scholarship, innovation and to share information. Access to networked computer information in general and to the Internet, in particular, supports the academic community by providing a link to electronic information in a variety of formats and covering all academic disciplines. As with any resource, it is possible to misuse computing resources and facilities and to abuse access to the Internet. The following statements address, in general terms, the District's policies concerning computing use.

The Chancellor is authorized to promulgate policies and procedures to implement this policy. Refer to the Business Procedures Manual for additional information.

Use of District Resources

Use of District computing resources and facilities requires that individual users act in compliance with District policies and procedures, and failure to comply may result in restriction or revocation of access to District resources. Computing "resources and facilities" include, but are not limited to District and college-owned host computer systems, networks, peripheral equipment (such as modems, terminals and printers), computers and workstations, software, data sets, storage devices (such as CD-ROMS, hard and soft disks and the like), and all computer communications controlled, administered, or accessed directly or indirectly by the District or by any user. The District provides users with an account that permits use of the computing resources and facilities within policies and procedures established by the District. Any person who uses District computing resources and facilities through District-owned equipment (such as public access computers at the libraries and computer labs) is also a user and is permitted to use the computing resources and facilities within policies and procedures established by the District. Users must respect the integrity of computing resources and facilities, respect the rights of other users, and comply with all relevant laws (local, state, federal and international), District policies and procedures, and contractual agreements. The District reserves the right to limit, restrict or deny computing resources and facilities for those who violate District policies, procedures, or local, state or federal laws.

Freedom of Expression

Censorship is not compatible with the goals of the District. The District shall not limit adult users' voluntary access to any information due to its content when it meets the standard of legality. A minor's parent may permit a minor user to have voluntary access to any information that meets the standard of legality. Access to information by a user may be blocked at the request of that user, or at the request of a minor user's parent.

Privacy

The general right to privacy is extended to the electronic environment to the extent possible. Users have a lessened expectation of privacy when using computer resources and facilities owned by public institutions such as the District. Issuance of a password or other means of access is to assure appropriate confidentiality of District files and information. It is not a guarantee of privacy nor a license for abuse or improper use of the District's computing resources and facilities. Privacy is mitigated by the Texas Public Information Act, administrative review, computer system administration, audits, and the nature of the electronic medium itself. Contents of electronic files will be examined or disclosed only when authorized by the user, approved by designated District officials, or required by law.

Intellectual Property

All members of the District community should be aware that property laws apply to the electronic environment. Users must abide by all software licenses. District copyright and software policies and procedures, and applicable federal and state laws. Users should assume that works communicated through a network are subject to copyright unless specifically stated otherwise. Unless permission of the author is obtained, utilization of any electronically transmitted information must comply with the "fair use" principle found in federal copyright law.

Criminal and Illegal Acts

Computing resources of the District, which include the hardware, software and network environment, shall not be used for illegal activities. Any illegal use of these resources will be dealt with by the appropriate District authorities and/or other legal and law enforcement agencies. Criminal and illegal use may involve, but is not limited to: unauthorized access, intentional corruption or misuse of computing resources, theft, defacement, obscenity, child pornography, and harassment based upon race, ethnicity, national origin, disability, age, religion or sex.

Authorized Use

Computing resources are provided by the District to accomplish tasks related to the District's mission. Some computers may be dedicated to specific enterprises or teaching missions that limit their use. Incidental personal use of computing resources is acceptable if the use:

1. Imposes no measurable cost on the District;
2. Is not harmful to the District;
3. Is not a hindrance to the daily operations of the District; and
4. Has no adverse effect upon an individual's job or educational performance.

Unauthorized Use

Unauthorized use of the District's computing resources and facilities includes but is not limited to: illegal activities; failure to comply with laws, license agreements, and contracts governing network software and hardware use; abuse of communal resources; use of computing resources for unauthorized commercial purposes or personal gain; failure to protect the user's password or use of the user's account; breach of computer security, harmful access or invasion of privacy; use of computing resources for anonymous or identity-masked messages to other District users; or unauthorized encryption. Refer to the Business Procedures Manual for additional information.

Individual Responsibility for Use of Computing Resources and Facilities

All members of the District community will use these resources and facilities in accordance with District policies and procedures as well as all laws. Failure to fulfill these responsibilities may lead to the cancellation of computer access; other disciplinary action by the District and/or referral to legal and law enforcement agencies, in accord with existing District policies and procedures. Individuals using the District's computing resources or facilities shall:

1. Use District computing resources and facilities in accord with this policy, and respect the rights of other computer users by complying with laws, license agreements and contracts.
2. Use communal resources with respect for others. Disruptive mailings and print jobs, tying up work stations, and other disproportionate use of computing facilities prevent others from using these resources.

3. Use of District computing accounts must be limited to authorized purposes. Use of District-owned resources and facilities shall be limited to District-related business or incidental personal use as defined in this policy. Use of computing resources for unauthorized commercial purposes or personal gain is prohibited.

4. Protect the individual's password and use of the individual's account. The user shall not use another person's identification, account or password without his or her permission. Confidential information contained on various computers shall not be shared with others except when those persons are authorized to receive the information. Users shall not intentionally seek, read, provide, remove, reconfigure or modify information in or obtain copies of any files, accounts, software, hardware, programs, or passwords belonging to other computer users or the District without the permission of those other computer users or the District. A user must obtain written permission from the owner of a file to alter or copy a file if the file does not belong to the user or the file has not been sent to the user by the owner.

5. Report improper use of computer resources and facilities which may include:
   a. breach of computer security
   b. unauthorized access to computing resources
   c. release of password or other confidential information on computer security
   d. harmful access
   e. alteration, damage, or destruction of data
   f. injection of a destructive computer virus
   g. invasion of privacy
   h. reading files without authorization
   i. criminal and illegal acts

6. Comply with requests concerning computing from the system operator.

7. Report any incidents of harassment using District computing resources and facilities in accord with the District's policy. It may be harassment if the behavior:
   a. is unwelcome;
   b. interferes with the user's ability, or the ability of others to work or study;
   c. creates an intimidating, hostile or offensive environment. Alternatively, users may file a grievance through appropriate channels.

8. Respect the forum (talk groups, bulletin boards, public computing facilities) when communicating ideas to or with District computing facilities and resources (includes access to external networks). All communications should reflect high ethical standards and mutual respect and civility. Users may use external network (e.g., BITNET, Internet) links solely for the purposes permitted in these policies and in the external network guidelines. Users are responsible for obtaining and adhering to all of the policies published by the external networks they use. The ability to connect to external systems through the District systems does not imply the right to connect to these systems or to make use of these systems unless properly authorized by the owners of those systems.

Computer Software and Copyright Law

The District respects the copyrights of others. With very few exceptions, all computer software and documentation is protected by federal copyright law. The unauthorized or unlicensed use, duplication or copying of computer software or documentation is contrary to DCCCD policy and is a violation of the law. Violators are subject to both civil and criminal penalties and/or disciplinary action. Students may use individually owned software on DCCCD computers only if the user can provide proof of a license from the copyright owner or will sign a statement to that effect. Additionally, installation of any individually software may need to first be approved by the appropriate college official. Students may have access to computer networks only to further the institutional goals of the DCCCD.

COMMUNICABLE DISEASE POLICY

Purpose: The Board acknowledges the serious threat to our community and nation posed by the AIDS epidemic. This policy and other procedures developed by the Chancellor shall emphasize educating employees and students concerning AIDS and managing each case of AIDS individually with sensitivity, flexibility, and concern for the individual as well as employees and students. In addition, this policy defines and addresses other communicable diseases which from time to time arise in the colleges and District among students and employees.

Philosophy: The District's decisions concerning a person who has a communicable disease shall be based upon current and well-informed medical judgement which includes the nature of the disease, risk of transmission to others, symptoms and special circumstances of the person, and balancing identifiable risks and available alternatives to respond to a student or employee with a communicable disease.

Nondiscrimination

Students: No student will be required to cease attending a college or participating in college functions solely on the basis of diagnosis of a communicable disease.

Employees: An employee who has a communicable disease will be treated in the same manner as other employees who have other illnesses or injuries.

Confidentiality

The District shall comply with applicable statutes and regulations which protect the privacy of persons who have a communicable disease.

Education

The Chancellor shall develop and maintain a comprehensive educational program regarding HIV infection for students and employees.

Each college shall have a Communicable Disease Coordinator. The coordinator shall be a registered nurse who has received training in communicable diseases, particularly HIV infection. A student or employee who has a communicable disease is strongly encouraged to report the disease to the coordinator.

Counseling

The Communicable Disease Coordinator shall refer students and employees to sources of testing for HIV infection and counseling upon voluntary request. An individual shall bear the expenses of such testing and counseling.

FIREARMS POLICY

Firearms are strictly forbidden upon any campus (including all buildings and grounds) and all other locations owned, operated or leased by the Dallas County Community College District. This prohibition applies to any person including a person who possesses a license to carry a handgun under the Concealed Handgun Law.

STUDENT RIGHT TO KNOW ACT

Under the terms of the Student Right to Know Act, the Dallas County Community College District maintains and updates on an annual basis, student persistence, graduation rates, transfer rates and other relevant statistics. To obtain copies of these reports, contact the District Office of Research. Campus crime statistics may be obtained from college police/security offices.

(Published in compliance with the Student Right-to-Know and Campus Security Act; Public Law 101-542)
# Texas Department of Health

**Recommended Adult Immunization Schedule**

<table>
<thead>
<tr>
<th>Vaccine/Toxoid/Biological</th>
<th>Primary Schedule &amp; Boosters</th>
<th>Indications</th>
<th>Major Precautions &amp; Contraindications Other Than Primary Allergies</th>
<th>Special Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus-Diphtheria Toxoid</td>
<td>2 doses (IM) 4 weeks apart with 3rd doses (booster) 6-12 months then a booster every 10 years.</td>
<td>All Adults</td>
<td>Pregnancy; immuno-compromised hypersensitivity to neomycin and/or eggs</td>
<td>Persons vaccinated with killed measles vaccine (1963-1967) should be revaccinated with live measles vaccine; MMR is the vaccine of choice if the person is likely to be susceptible to more than 1 agent</td>
</tr>
<tr>
<td>Measles Mumps Rubella (MMR) Vaccine</td>
<td>1 dose (SC); boosters for measles are necessary for certain adults.</td>
<td>Measles/Mumps for adults born after 1/1/57 who lack a vaccine history for measles and mumps since their 1st birthday OR serological proof of immunity OR a physician validated statement of Measles/ Mumps illness. 2 doses of measles vaccine are recommended for persons at high risk of exposure (e.g. medical personnel). Rubella for any adult who lacks documentation of rubella vaccine since the 1st birthday OR serological proof of immunity.</td>
<td>Persons vaccinated with killed measles vaccine (1963-1967) should be revaccinated with live measles vaccine; MMR is the vaccine of choice if the person is likely to be susceptible to more than 1 agent</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B Vaccine</td>
<td>2 doses (IM) 4 weeks apart; 3rd dose 5 months after 2nd.</td>
<td>Adults at increased risk of occupational, environmental, social, or family exposure</td>
<td>Pregnancy; immuno-compromised hypersensitivity to neomycin and/or eggs</td>
<td>Persons vaccinated with killed measles vaccine (1963-1967) should be revaccinated with live measles vaccine; MMR is the vaccine of choice if the person is likely to be susceptible to more than 1 agent</td>
</tr>
<tr>
<td>Influenza Vaccine (Split or Whole Vaccine)</td>
<td>1 dose annually (IM)</td>
<td>Adults with high-risk conditions; adults &gt; or = 65 years old; health care workers</td>
<td>Hypersensitivity to eggs; may be given during pregnancy to high-risk patients.</td>
<td></td>
</tr>
<tr>
<td>Pneumo-Coccal Polysaccharide Vaccine (23 Valant)</td>
<td>1 dose (IM or SC); boosters after 6 years indicated for certain</td>
<td>Underlying health conditions; adults 65 years old and older; adults with anatomic or functional asplenia</td>
<td>Pregnancy</td>
<td>Immune response better if vaccinated prior to splenectomy</td>
</tr>
</tbody>
</table>

## ALERT!!

**MEASLES** (aka. rubella, Red Measles, Hard Measles, 10-day Measles)

Measles is a highly contagious viral disease. Antibiotics are NOT available to treat persons infected with this organism. Recent outbreaks of this illness have included many hospitalizations and several deaths among college-aged persons, for these reasons it is strongly recommended that students of Institutions of Higher Education have two doses of the vaccine prior to beginning classes. Most young adults have had only one dose. The measles vaccine is most often given in combination with the vaccines for mumps and rubella which are also caused by viruses.

**TETANUS** (aka. Lockjaw)

The illness caused by tetanus results from the poison produced by a bacteria. Again this is a very difficult illness to treat once it occurs and prevention is the most appropriate choice. The vaccine is effective for about 10 years and needs to be boosted at that interval. It is now common for older adults to develop Tetanus in the United States as many adults do not receive the recommended 10 year boosters. The Tetanus vaccine should be given in combination with the diphtheria vaccine.

**POLIOMYELITIS**

In the United States, polio immunization is not routinely recommended for persons 18 years of age or older. However, if travel to other parts of the world is planned, a physician should be contacted for specific recommendations.

**SECTION 2.09 AND 2.09A TEX. EDU. CODE**

The campus health centers have information regarding local providers of immunization services. Check with the health center for specific local information.
BROOKHAVEN COLLEGE

Brookhaven College, the seventh member institution of the Dallas County Community College District, is conveniently located north of the city of Dallas in Farmers Branch. Its primary service area is northwest Dallas County -- the core of one of the fastest growing business communities in the nation.

The outstanding faculty, excellent facilities and innovative programs offered at Brookhaven College combine to make an impressive educational package. The college is equipped to serve the changing, growing community with a wide variety of educational, cultural and recreational opportunities. Brookhaven College is recognized as a valuable community resource, providing credit programs as well as workforce and continuing education.

You will find a full range of accredited freshman- and sophomore-level college courses offered at Brookhaven, which are fully transferable to four-year colleges and universities. Students may also pursue a two-year associate degree; work toward certification in technical/occupational programs; gain a new skill or refresh an existing one; or simply explore an area of interest.

Brookhaven College Student services include counseling and advisement for all students, as well as career counseling and job placement assistance, special programs and services for women, veterans, returning adults, students for whom English is a second language, and those with disabilities.

A variety of student and community cultural enrichment offerings complement Brookhaven College's academic programs. Through the Fine Arts Division, the Brookhaven College Center For the Arts makes a variety of cultural and entertainment events available to the Dallas community. Offerings include visual arts exhibits, concerts, dance and theatrical performances by students. National talent who have been showcased include writer/poet Maya Angelou; guitarist Earl Klugh; jazz group Spyro Gyra; and The Flying Karamozov Brothers.

The Brookhaven College campus is situated on a 200-acre site at 3939 Valley View Lane just north of LBJ Freeway (I-635). State-of-the-art facilities include a 65,000-square-foot Student Services Center, a computing/communications center, a 700-seat performance hall, a fully-equipped Center for Business Studies, a top-notch Parent/Child Study Center, and an automotive shop with the latest technical equipment.

The Brookhaven College Education Center, located at Marsh Lane and Frankford Road, serves the educational needs of the population of far northwest Dallas. Brookhaven College at Midway, located at Midway and Alpha roads, provides additional classroom space. The Brookhaven campus is fully accessible to those with physical disabilities.

Accreditation

Brookhaven College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, GA 30033-4097; Telephone number 404-679-4501) to award the associate degree.

Institutional Memberships

- American Association of Community Colleges
- Texas Public Community/Junior College Association
- The Texas Association of Colleges and Universities
- The League for Innovation in the Community College

Brookhaven College is recognized and sanctioned by the Coordinating Board of the Texas Education Agency.

### BROOKHAVEN COLLEGE ADMINISTRATION

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Phone</th>
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<td>Maxine Rogers</td>
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### INSTRUCTIONAL DIVISIONS

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### STUDENT & CAMPUS SERVICES

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<td>Athletics Department</td>
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<td>Bookstore, Wallace's</td>
<td>972-484-7652</td>
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<td>Box Office (Center For the Arts)</td>
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<td>Business Office</td>
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<td>Education Center, 18106 Marsh Lane</td>
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<td>EXCEL/Exemplary Programs Office</td>
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<td>Senior Adult Education Office</td>
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<td>Brumbach, Mary A.</td>
<td>Faculty/Exec. Director, Resource and Economic Development, Mary Hardin-Baylor College, B.A.; University of North Texas, M.A., Ph.D.</td>
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<td>Burnette, Sherie</td>
<td>Assistant Dean, Workforce &amp; Continuing Education University of Texas, B.S., M.S.Ed.</td>
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<td>Lamar Univ., B.S.A.; University of North Texas, M.B.E.</td>
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<td>Carpenter, Beverly Anne</td>
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<td>Chandler, Sandra</td>
<td>Program Coordinator/Instructor, A.D. Nursing University of N.W. Louisiana, B.S.N., Texas Women's Univ., M.S.</td>
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<td>Cincair, Carol L.</td>
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Maness, Marie Y. Faculty, Physical Education
Florida Atlantic Univ., B.S.; Georgia State Univ., M.Ed.;
Texas Woman's Univ., Ph.D.

Maxey, Susan Faculty, Geology
Univ. of Texas/Austin, B.S.; Univ. of Dallas, M.A.T.

Maxwell, Rick Faculty, Art
Univ. of Dallas, B.A.; Southern Methodist Univ., M.F.A.

McAdams, Charles D. Faculty, Fine Arts/ Humanities
Louisiana State Univ., B.M.Ed.; Memphis State Univ., M.A.;
East Texas State Univ., Ph.D.

McCoy, M. Clarke Faculty, Accounting
S.E. Oklahoma State Univ., B.S.; Texas A&M/Commerce, M.B.A.

Meersman, Key Faculty, Dance
Marymount Manhattan College, B.A.;
Southwestern Methodist University, M.F.A.

McLelland, Sue Annette Faculty, A.D. Nursing
Baylor Univ., B.S.N.; Texas Woman's Univ., M.S.N., R.R.T., R.C.P.

Meltzer, Lisa Director, Career Development Center
Denison Univ., B.A.; Arizona State Univ., M.A.

Miller, J. Zack Dean, Communications
Stanford Univ., B.A.; Reed College, M.A.T.

Mills, Cynthia Faculty, Art
Southern Methodist Univ., B.F.A., M.A.

Moore, Janice E. Faculty, A.D. Nursing
Univ. of Texas/Arlington, B.S.N.; Texas Women's Univ., M.S.N.

Moore, Michael L. Faculty/Director, Media Services
Kilgore Jr. College, A.S.; East Texas State Univ., B.S., M.S.

Neal, John F. Faculty, Journalism/Visual Communications
Univ. of Houston, B.A.; Univ. of Texas/Austin, M.A.;
East Texas State Univ., M.S.; Univ. of North Texas, Ph.D.

Neal, Leslie Faculty, English as a Second Language
Wheaton College, B.A., University of North Texas, M.B.A., M.A.

Nelson, Eileen Faculty, French/ Spanish
Univ. of Dallas, B.A.; Tulane Univ., M.A.; Univ. of Dallas, M.A.

Ostrom Aaron B.W. Faculty, English as a Second Language
Univ. of Texas/Arlington, M.A.; Univ. of Texas/Austin, Ph.D.

Paris, Kevin Faculty, English as a Second Language
Univ. of Puerto Rico, B.A. M.Ed.

Pendleton, Julienne K. Faculty, Mathematics
Univ. of Texas/Austin, B.A., M.Ed., Ph.D.

Perez, Julie Marie Counselor/Instruction, Human Dev. & Contin. Division
North Texas State Univ., B.S., W.Ed.; Texas Woman's Univ., Ph.D.

Quetin, Jane Faculty, Theatre
San Jose State Univ., B.A.; Univ. of Utah, M.F.A.

Rakocy, Joe Faculty, Automotive
Northwood Univ., B.B.A.

Reagan, David Director, Campus Police Dept
B.S., Univ. of Texas/Arlington

Reding, Diana L. Faculty, A.D. Nursing
Hawthwick College, B.S; West Texas State Univ., M.S.

Rogers, Maxine P. Vice President, Business Services
Prairie View A&M Univ., B.A., Amber University, M.B.A.

Rountree, Rhuwan C. (Rudy) Faculty, Government
East Texas State Univ., B.A., M.A.

Routh, Brenda F. Faculty, A.D. Nursing
California State Univ., B.S., M.S.

Rowe, E. Jane Faculty, Child Development
Michigan State Univ., B.S.; Univ. of Tennessee, M.S.;
East Texas State Univ., Ph.D.

Sanders, Joe Director, Financial Aid
Richland College, A.A.S.

Saucedo, Buddy Visiting Scholar, Mathematics
Texas A&M, B.S.

Schmitt, Justice Faculty, A.D. Nursing
Univ. of Michigan, B.S.N., Texas Woman's Univ., M.S.N.

Schuster, Steve Faculty, History/Geography
Texas Christian Univ., B.A., M.A., Ph.D.; Univ. of Utah, M.S.

Schwettzer, Carrie Director, Student Programs and Resources
Univ. of Texas/Austin, B.A.

Shep, Phillip P. Faculty, Biology
Concordia Teachers College, B.S.; Arizona State Univ., M.S.

Shirley, Jack Raymond Faculty, Accounting
North Texas State Univ., B.B.A.; Univ. of Dallas, M.B.A.

Sidhu, Anahita Faculty, Physics
Univ. of Karachi, B.S., M.S.; Univ. of Hawaii, M.Ed.

Smith, Martha Faculty, English
Prairie View A&M, B.A.; Texas Southern Univ., M.A.

Smith, Shirley G. Faculty, Child Development
Univ. of Texas/Austin, B.A.; State Univ. of N.Y./Brooklyn, M.A.

Speyerer, Carol Faculty, A.D. Nursing
Incarnate Word College, B.S.N.; Texas Woman's Univ., M.S.N.;
Novus Univ., Florida, Ed.D.

Stewart-Alexander, Selena Faculty, Developmental Reading and Writing
Southern Methodist Univ., B.F.A.; Univ. of Texas/Arlington, M.A.

Stewart, W. Gene Faculty, Management
Univ. of Arkansas, B.S.E.; Southern Methodist Univ., M.Ed.;
Univ. of North Texas, Ed.D.

Stock, Bob Faculty, Physical Education
San Jose State College, B.A.; East Texas State Univ., M.S.

Stroman, Jamile Faculty, English as a Second Language
Univ. of Oregon, B.A., M.A.

Stuart-Nelson, Laurie Faculty, Visual Communications
Univ. of North Texas, B.F.A., M.F.A.

Sullivan, Marilyn Faculty, Fashion Marketing
Kansas State Univ., B.S., M.S.

Tatlaferro, Monica Dir. Public Information & Technological Communication
Abilene Christian Univ., B.A.

Taylor, Donald Lee Faculty, Art
Louisville School of Art, B.F.A.; Washington Univ., M.F.A.

Trammell, Deborah Faculty, A.D. Nursing
Univ. of Virginia, B.S.N.; Univ. of Texas/Arlington, M.S.N.

Ueoka, Travis Faculty, Photography
New Mexico Highland Univ., B.S.; Indiana Univ., M.S.;
East Texas State Univ., M.S.L.S., Ed.D.

Vaglienti, Kendra Visiting Scholar, English
Texas A&M Univ., B.A.; Sam Houston State Univ., M.A.

Venza, Stephanie Faculty, English
Lamar Univ., B.A.; Univ. of Texas/Austin, M.A.,
Univ. of Texas/Arlington, M.A.

Vildanes, Alice W. President
University of Alabama, B.S., M.A., Ph.D.

Villarreal, Ramiro Faculty, Computer Science
Univ. of Texas/San Antonio, B.S.; Texas A&M Univ., M.S.

Walsdorf, Marsha Visiting Scholar, Management
Dallas Baptist Univ., B.B.A., M.B.A.

Weaver, David L. Faculty, Accounting
Oklahoma State Univ., B.S.; Univ. of North Texas, M.B.A.

Westberry, Marjorie Faculty, English
Allegheny College, B.A.; Wayne State Univ., M.A.,
Texas Woman's Univ., Ph.D.

Weston, Joan Laverson Faculty, Sociology
Univ. of Michigan, B.A.; Southern Methodist Univ., M.A.;
Univ. of North Texas, Ph.D.

Whitson, Kathleen K. Associate Dean, Exemplary Programs
Dallas Baptist Univ., B.A.; Southern Methodist Univ., M.L.A.;
Univ. of North Texas, Ph.D.

Wickham, Sheil Faculty, English as a Second Language
Parke College/Teheran, B.A.; Texas Woman's Univ., M.Ed.;
Southern Methodist Univ., M.A.

Williamson, John D. Faculty, Social Science
Louisiana Technical Univ., B.A., M.A.; North Texas Univ., M.A.

Ziegler, Marla Faculty, Art
McMurry College, B.A.; Southern Methodist Univ., M.A.
CEDAR VALLEY COLLEGE

A rewarding educational experience awaits students at Cedar Valley College, where a dedicated faculty, innovative programs, functional campus design and the beauty of nature combine to create an exciting learning environment.

Cedar Valley was among the last of seven colleges to open in the Dallas County Community College District, enrolling its first students in 1977. It is a small and inviting campus enrolling approximately 3,000 college credit students and a similar number of non-credit continuing education students each fall semester.

A comprehensive curriculum with a variety of flexible formats is offered at Cedar Valley including academic transfer programs, career programs including work force development training for area employers, and non-credit continuing education courses. In addition, the college offers:

- Mini-mesters between the traditional fall and spring semesters
- Special services (such as tutoring and note-taking) for disabled students
- A host of distance learning opportunities that can be taken at home by telecourse, computer, and live TV, as well as the DCCCD's only completely on-line biology course
- A nationally recognized Music and Fine Arts program with two internationally known artists on the faculty
- A Law Enforcement Academy
- A Student Resource Center equipped with state-of-the-art computers with internet access
- A Career and Job Placement Center
- Programs for high school students including Tech Prep, Concurrent Credit, and TAAS/TASP preparation
- A Kiddie Kollege.

The Campus

Cedar Valley is located on 353 acres in southern Dallas County just south of I-20. The campus plan enhances the natural beauty of the site. Campus facilities are linked by a pedestrian walk along two sides of a 17-acre lake. Cedar Valley has a gazebo that extends into the lake, a 400-seat performance hall, a gymnasium, baseball field, and a surgery and barn for the Veterinary Technology program.

Statement of Purpose

The purpose of DCCCD and Cedar Valley College is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for the development of intellectual skills, job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve. In all our efforts, Cedar Valley strives to meet the needs and exceed the expectations of those the college serves.

Cedar Valley’s specific mission is to enrich the potential and increase the productivity of people in the southern part of Dallas County by providing quality educational experiences in a caring and innovative environment.

Accreditation

Cedar Valley, one of seven colleges of the Dallas County Community College District, is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: telephone number 404-897-4501) to award the Associate of Arts and Sciences degree and the Associate of Applied Sciences degree.

CEDAR VALLEY COLLEGE ADMINISTRATION

President .......................................................... Carol Spencer .............................................. 972-860-8250
Vice President of Academic & Student Affairs........ Ivan Martinez ............................................. 972-860-8261
Dean of Business/Science/Technology............... Vernon Beuke ............................................. 972-860-8160
Dean of Business Services ................................ David Browning ........................................... 972-860-8007
Dean of Continuing Education ...................... Rhonda Jackson ........................................... 972-860-8021
Dean of Educational Resources & Technology........ Wallace Clarkson ....................................... 972-860-8051
Dean of External Affairs ................................ Jerry Cotton ............................................... 972-860-8157
Dean of Institutional Effectiveness & Research ........ Claire Gauntlett ........................................ 972-860-8126
Dean of Liberal Arts ........................................ John Souders .......................................... 972-860-8120
Dean of Resource Development ................... Pam Gist ..................................................... 972-860-8180
Dean of Student Support Services, Interim ........ Brenda Carter ............................................. 972-860-8263
Assistant Dean of Continuing Education........ Robert Wallace ............................................. 972-860-8206
Associate Dean of Educational Resources .......... Edna White ................................................ 972-860-8152
Director of Financial Aid ................................ Frank Ellis ................................................... 972-860-8280
Director of Human Resources ....................... Kay Shimonek ............................................. 972-860-8225
Director of Small Business Development Center ... TBA ..................................................... 972-709-5878
Director of Special Populations/TRIO .............. Grenna Fynn ............................................. 972-860-8181
Director of Veterinary Technology ............... Brian Heim .................................................. 972-860-8019
Registrar ......................................................... John Williamson ......................................... 972-860-8203
Asst. Director Admissions/Registrar ............... Carolyn Boswell-Ward ................................ 972-860-8204
CEedar Valley CollEgE FaculTy and AdmInistratiOn

Adkins, James A. Physics and Astronomy
Univ. of Texas at Arlington, B.S., M.A.

Armstrong, W. L. Program Director, FCI
Bishop College, B.A.; Texas A&M at Commerce, M.S.

Azizi, Mohamed Mathematics
Cairo Univ., B.S.; Univ. of Wyoming, B.S., M.S.

Beecham, Ron Biology
Texas A&M at Commerce, B.S., M.S.

Beuke, Vernon, Dean of Business/Science/Technology
Texas Wesleyan Univ., B.S.; Northern Arizona Univ., M.S.; Cornell Univ., Ph.D.

Bilbrey, Keith A/C Refrigeration
Tarrant County Junior College, A.A.S.; Northwood Univ., B.B.A.

Boswell-Ward, Carolyn Asst. Dir. Admissions & Registrar
El Centro, A.A.S.

Breaux, Isiah Instructional Specialist, Comm. Bldg. Maint., FCI
Nova Uni., B.A.

Brodnax, Randall Art
Northwestern State Univ., B.A., M.A.

Brown, David Dean of Business Services
Univ. of Texas at Dallas, B.S.A.

Burnett, Elaine English
Bishop College, B.S.; Texas A&M at Commerce, M.Ed.;
Texas Woman's Univ., Ph.D.

Carman, James Instructional Specialist, Tech. Math, FCI
Trenton State Univ., B.A.

Carter, Brenda Dean of Student Support Services, Interim
Louisiana Tech Univ., B.A.; Mississippi State Univ., M.S.

Christman, Calvin History
Ohio State Univ., Ph.D.

Choudhury, Anil Instructional Specialist, FCI
Univ. of Delaware, B.S., M.S.; Sam Houston State Univ., M.S.

Clarkson, Wallace Dean of Educational Resources & Technology
Univ. of Texas, B.S.; Univ. of Arkansas, M.S.

Cox, Sandra Spanish
Univ. of Texas at Arlington, B.A., M.A.

Cotton, Jerry Instructional Dean
Hardin-Simmons Univ., B.S.; SW Texas State Univ., M.A.;
Texas Tech, Ph.D.

Dawson, Edward C. Music
Univ. of North Carolina, B.A., M.M.

Desai, Sureykkant Accounting
Univ. of Texas, B.S.; Univ. of Texas at Arlington, M.B.A., M.P.A.;
Texas A&M at Commerce, Ed.D.

Diamore, Roger E. Coordinator of Music
Univ. of North Texas, B.M.E., M.M.E.

Earle, Brian D. Chemistry
Univ. of North Texas, B.S.; Univ. of Texas at Dallas, M.A.

Elshennawy, David AC Refrigeration
Tarrant County Junior College, A.A.S.

Eisen, Ines English
Tarleton State Univ., B.A.; State Univ. of New York, Geneseo, M.A.S.

Ellech, Frank Director of Financial Aid
Texas Christian Univ., B.B.A.

Fant, Milton Automotive Career Technician
Certified Technician, N.I.A.S.E.; Cedar Valley College, A.A.S.

Faulkner, Susan English
Univ. of Kansas, B.A., B.S.; Texas A&M at Commerce, M.Ed., Ed.D.

Fletcher, Norman R. Mathematics
Texas A&M College, A.S.; Texas A&M at Commerce, B.S., M.S., Ed.D.

Fynn, greenhouse Director of Special Populations/TRIO
Univ. of Natal Durban, South Africa, B.S.; Dallas Baptist Univ., M.B.A.

Gauntlett, Claire Dean of Institutional Effectiveness & Research
Univ. of North Texas, B.A.; Univ. of Arizona, M.A.;
Texas A&M at Commerce, Ed.D.

Gibbs, Sam Music
Anderson College, B.A.; Western Michigan Univ., M.M.;
Univ. of North Texas, M.S.

Glatt, Pam Dean of Resource Development
Univ. of Texas at Arlington, B.A., M.A.T.

Gray, Bryce C. Mathematics
Bishop College, A.A.; Prairie View A&M Univ., B.S.;
Univ. of North Texas, M.S.

Harlow, Diane Office Technology
Univ. of North Texas, B.S., M.B.A., C.P.S.

Helm, Brian Director of Veterinary Technology
Sul Ross State Univ., B.S.; Texas A&M, B.S., D.V.M.

Hester, Ed Automotive Career Technician
Certified Technician, N.I.A.S.E.; Cedar Valley College, A.A.S.;
Our Lady of the Lake Univ., B.A.S.

Jackson, Rhonda Dean of Continuing Education
Mt. View College, A.A.S.; Midwestern State Univ., B.S.;
Texas Woman's Univ., M.S.

Jimenez, Hector Counselor/Human Dev.
Texas A&M at Commerce, B.S., M.Ed.

Jones, Andrew C. Exec. Vice President of Academic & Student Affairs
Univ. of Maryland, M.Ed.; Temple University, Ed.D.

Jones, A.Vin Instructional Specialist, Upholstery, FCI
Elkins Institute, Certificate

Jones, Pat College Director of Human Resources Studies, Odessa Jr. College; Eastern New Mexico Univ.;
Cedar Valley College

Lenoir, Blanchard Real Estate
Sam Houston State Univ., B.B.A.; Texas A&M Univ., M.Ed., Ph.D.

Leiblitz, Lola Speech Communication
Purdue Univ., B.A.; Ohio State Univ., M.A.

Lineberry, William L. Veterinary Technology
Texas A&M Univ., B.S.; Univ. of Texas at Dallas, D.T.A.T. Animal Technician Registered

Maples, Alan Computer Information Systems
Texas A&M Univ., B.A., B.B.A., M.C.S.; Univ. of North Texas, Ph.D.

Martinez, Ivan Vice President of Academic & Student Affairs
The Florida State Univ., B.A., M.S.

Meachum, Bette M. Psychology
Northwestern State Univ., B.M.E., M.Ed.; Baylor Univ., Ed.D.

Minger, Diane Indiana State University B.S., Texas Woman's University, M.S., Ph.D.

Mungenast, Andy Computer Information Systems
Cedar Valley College, A.A.S.; Dallas Baptist Univ., B.B.A.;
Texas A&M at Commerce, M.B.A.

Noblin, Linda M. Instructional Specialist, Business English, FCI
McNeese State Univ., B.A.

Parolis, Nancy Instructional Specialist, ESL, FCI
Hunter College, B.S.

Paulkner, Susan English
Univ. of Kansas, B.A., B.S.; Texas A&M at Commerce, M.Ed., Ed.D.

Pettigrew, Norman R. Mathematics
Texas A&M College, A.S.; Texas A&M at Commerce, B.S., M.S., Ed.D.

Phiffner, John E. Dean of Student Support Services, Interim
Univ. of Natal Durban, South Africa, B.S.; Dallas Baptist Univ., M.B.A.

Ramirez, Diana Dean of Institutional Effectiveness & Research
Univ. of North Texas, B.A.; Univ. of Arizona, M.A.;
Texas A&M at Commerce, Ed.D.

Rice, Sam Music
Anderson College, B.A.; Western Michigan Univ., M.M.;
Univ. of North Texas, M.S.
Paul, Duncan A. .................................................. Motorcycle, Outboard Engine & Small Engine
Univ. of North Texas, B.S.

Pharr, John ........................................................... Business and Economics
Univ. of North Texas, B.A., M.S.

Pratt, John ............................................................. Business Law & Government
Southern Methodist Univ., B.A., J.D., Texas Law License

Ridgway, Linda ...................................................... Art
Louisville School of Art, M.F.A.; Tulane Univ., M.F.A.

Riley, Joel L. ............................................................. English
Bishop College, B.S., Univ. of North Texas, M.Ed.

Rios-Harris, Rebekah .............................................. English
Dallas Baptist Univ., B.A., M.Ed.; Univ. of Texas at Arlington, M.A.

Rolling Jr., Lincoln .................................................. History
Sam Houston State Univ., B.A., M.A.; Univ. of Texas at Austin, Ph.D.

Serrano, Gennette ................................................... Computer Information Systems
Texas A&M at Commerce, B.S.

Shimonek, Kay ....................................................... Director of Human Resources
Dallas Baptist Univ., B.S.

Sloan, Jane .............................................................. Biology
Texas A&M at Commerce, B.S., M.S., M.S.

Smith, Rosemary ..................................................... Patient Care Technician
El Centro College, A.A.S.; Univ. Texas A&M at Commerce, B.S.

Souders, Jr., John C. .................................................. Dean of Liberal Arts
Texas A&M Univ., B.S., M.E.; Air Force Institute of Technology, Ph.D.

Spencer, Carol J. ...................................................... President
Univ. of Nebraska, Lincoln, B.S., M.A.; Ohio State Univ., Ph.D.

Stewart Jr., Kerby M. ................................................ Music
Texas Christian Univ., B.F.A.

Stewart, Safitta ........................................................ Criminal Justice
Grambling State Univ., A.S., B.S., M.S.

Sullivan, Tim ......................................................... Anthropology/Sociology
Univ. of Southern California, B.A.; Southern Methodist Univ., M.A.

Thompson, Tommy ................................................ Mathematics
Southeastern Louisiana Univ., B.S.; Univ. of Texas at Austin, M.A., Ph.D.

Tremelling, Don ..................................................... Instructional Specialist, Bldg. Trades Maint., PCI Certified Technician

Beecham, Ron ....................................................... Biology
Texas A&M at Commerce, B.S., M.S.

Wallace, Robert L. .................................................. Assistant Dean of Continuing Education
Northwest Missouri State Univ., B.A.; Central Missouri State Univ., M.S.

Whitton, Bobby Joe ................................................ Instructional Specialist, Appliance Repair, PCI Certified Technician

Wiley, Sherry ......................................................... Director of Testing
Dallas Baptist Univ., B.A.A.S.

Willke, Dave .............................................................. Physical Education
Ball State Univ., B.S., M.A.

Williamson, John ................................................... Director of Admissions & Registrar
Kilgore Junior College, A.A.; Texas A&M at Commerce, B.S., M.S.

Willison, Burtene .................................................... Office Technology
Oklahoma State Univ., B.S., M.S.

Wimbish, Linda ....................................................... English
Stephen F. Austin, B.A.; Texas A&M at Commerce, M.S.

Wright, David L. ...................................................... Veterinary Technology
Texas A & M Univ., B.S., D.V.M.

Yeager, Nora ......................................................... Developmental Reading
Univ. of Evansville, B.A.; Ball State Univ., M.A., Ed.D.

Youngblood, Mary Ann ............................................... English
Univ. of Texas at Arlington, B.A.; Univ. of North Texas, M.A.

Zamarripa, Francisco .............................................. Instructional Specialist, PCI
Texas A&M at Kingsville, B.A.; Univ. of Oklahoma, M.A.
EASTFIELD COLLEGE

Eastfield College serves the eastern part of Dallas County, including East Dallas, Garland and Mesquite. Sometimes known as the "Educational Village" because of its unique architecture, it is located on 244 acres at the intersection of Interstate 30 and Motley Drive in Mesquite. Eastfield began operation in 1970 and has continually strived to assess the educational and cultural needs of students and the community in order to provide the finest in educational services.

Eastfield provides a full range of academic transfer programs balanced with technical/occupational programs that are designed to equip students for rewarding careers in Metroplex businesses and industries. In addition, thousands of people each semester find rewarding growth opportunities through the extensive continuing education course offerings.

Mission Statement
The mission of Eastfield College is to provide educational opportunities through high-quality instruction, services and programs in an environment conducive to student success in academic, technical, occupational, and continuing education. Our purpose is to develop responsible citizenship, to value diversity and cultural enrichment, and to be accountable and adaptable in our changing world.

The Campus
The Eastfield campus rises impressively from the plains of eastern Dallas County. Functional building clusters give students easy access to classrooms and labs and the overall aesthetic effect has earned Eastfield several architectural awards of excellence. The careful landscape planning includes terraced areas throughout the campus, a heated outdoor exercise pool, gymnasium, baseball field, jogging trail and tennis courts. In addition, the campus boasts an outstanding Performance Hall which serves the college and community for a variety of fine arts events.

Accreditation
Eastfield College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award the Associates degree.

Institutional Memberships
• The American Association of Community Colleges
• The League for Innovation in the Community College

Eastfield is recognized and sanctioned by the Texas Higher Education Coordinating Board of the Texas College and University System and the Texas Education Agency and is an Affirmative Action Equal Opportunity Institution.

EASTFIELD COLLEGE ADMINISTRATION

President .............................................................................................................................. Rodger A. Pool ........................................ 972-860-7001
Vice President of Business Services ................................................................. Jim Jones ........................................ 972-860-7603
Vice President of Instruction .............................................................................. Diane Martin ........................................ 972-860-7196
Vice President of Student & Institutional Development ................. Felix A. Zamora ........................................ 972-860-7610
Dean of Financial Affairs & Information Systems ............................................ Marvin Elke ........................................ 972-860-7612
Dean of Resource & Community Development ................................................. DeJoyce McVoy-Morgan ........................................ 972-860-7107
Dean of Workforce & Continuing Education ...................................................... Linda Grigeby ........................................ 972-860-7198
Dean of Instructional Support Services ............................................................. Emma Cronin ........................................ 972-860-7169
Dean of Student Support Services ................................................................. Reva Rattan ........................................ 972-860-7032
Associate Dean of Admissions & Testing ....................................................... Linda Richardson ........................................ 972-860-7105
Associate Dean of Continuing Education .......................................................... Johnnie O. Bellamy ........................................ 972-860-7169
Director of Appraisal Center ........................................................................... Charles E. Helton ........................................ 972-860-7010
Director of Career Services .............................................................................. Patsy Caropresi ........................................ 972-860-7038
Director of College Police ................................................................................. Tyler Moore ........................................ 972-860-8333
Director of Enrollment Management ............................................................. Maria Arocha ........................................ 972-860-7025
Director of Facilities Services ........................................................................... Arthur Sykes ........................................ 972-860-7588
Director of Human Resources ......................................................................... Kate Kelley ........................................ 972-860-7613
Director of Institutional Research .................................................................. Constance Howells ........................................ 972-860-8325
Director of Marketing & Communications .................................................. Sharon Cook ........................................ 972-860-7629
Director of Student Advising Services ............................................................ Mary H. Greeley-Miller ........................................ 972-860-7106
Director of Student Programs & Resources & Health Services .............. Donnine Balence ........................................ 972-860-7190
ADA Compliance Officer .................................................................................. Jim Jones ........................................ 972-860-7603

INSTRUCTIONAL DIVISION DEANS

Arts and Letters ................................................................................................. Vacant ........................................ 972-860-7132/7124
Business and Information Systems ................................................................. Don Baynham ........................................ 972-860-7119
Communication Arts and Applied Technologies ........................................... Gerald Kozlowski ........................................ 972-860-7143
Academic Support .......................................................................................... Bobbie J. Trout ........................................ 972-860-7108
Science, Mathematics, and Physical Education ......................................... Mark Presley ........................................ 972-860-7140
Social Sciences and Human Services ......................................................... Richard Cincir ........................................ 972-860-7156
EASTFIELD COLLEGE FACULTY AND ADMINISTRATION

Arocha, Marla ........................................... Director of Enrollment Management
- Eastfield College, A.A.; Univ. of Texas at Dallas, B.A.;
  Amber University, M.S.

Balantine, Donnie ................................... Dir. of Student Programs & Resources & Health Svcs.
Baylor Univ., B.A.; Texas Women's Univ., M.Ed.; Further study: Amber Univ., East Texas State Univ.

Balvin, Kenneth ....................................... Physical Education
Springfield College, B.S., M.S.; Further study: Ohio State Univ., Arizona Pacific College

Baynham, Don .......................................... Dean, Business and Information Systems
Eastfield College, A.A.S.; Abilene Christian Univ., B.B.A., M.S.
Further study: Amber Univ., Univ. of Texas at Dallas; GCU

Bellamy, Johnnie O. .................................. Associate Dean of Continuing Education
Univ. of North Texas, B.B.A.; M.Ed.

Bennett, James ......................................... Developmental Mathematics
Univ. of Texas at Austin, B.A.; Univ. of Houston, M.S.;
Further study: East Texas State Univ.

Boldt, Chris E. .......................................... Mathematics
Tech Tex, B.A.; Texas Christian Univ., M.S.; East Texas State Univ., Ed.D.; Further study: Texas Christian Univ., Univ. of Texas, Texas Woman's Univ., East Texas State Univ., Texas Woman's Univ.

Bowers, James ......................................... Developmental Reading
Arizona State Univ., B.A., M.A.

Bradshaw, Curt ........................................... Jazz
Northern Iowa, B.S.; Univ. of North Texas, M.M.

Brown, Emmett D. .................................... Counselor
Univ. of North Texas, B.A., M.E.D.; Further study: El Centro College, Prairie View A&M, Naval School of Photography

Brown, Harryette Stover ............................. English
Southern Methodist Univ., B.A., M.A.; Texas Woman's Univ., Ph.D.;
Further study: Univ. of Texas at Austin, East Texas State Univ., Texas Woman's Univ.

Brumback, Virginia .................................. English
Cumberland College, AA; Western Kentucky State Univ., B.A.;
Baylor Univ., M.A.; Univ. of North Texas, Ed.D.; Post-doctoral, Texas Woman's Univ., Texas Christian Univ.

Carratini, Maria ...................................... English as a Second Language
Pontifical Catholic Univ. of Puerto Rico, B.A., M.Ed.

Caropreso, Patty ...................................... Director of Career Services
Univ. of North Texas, B.S.; Texas Woman's Univ., M.A.

Carr, Laura V. ......................................... Interpreter Training Program
Illinois State Univ., B.S., New York Univ., M.A.; Further study:
Univ. of Massachusetts, Gallaudet Univ., East Texas State Univ.,
Univ. of North Texas, Univ. of LaVerne

Cate, Franklin M. ..................................... History
East Texas State Univ., B.A.; Univ. of Virginia, M.A.;
Further study: Univ. of Texas, Vanderbilt Univ.

Christian, Allen L. .................................. Mathematics
Arlington State College, B.S.; East Texas State Univ., M.S.; Univ. of North Texas, Ed.D.

Clintclair, Richard ................................. Dean, Social Sciences and Human Services
Northern State College, B.S.; Univ. of Wisconsin, M.S.; Ball State Univ., Ph.D.

Clayton, Glenn N., Jr. ............................. English
Univ. of North Texas, B.A.; M.A.; Further study: East Texas State Univ., Univ. of North Texas

Cook, Sharon ........................................ Director of Marketing and Communications
Baylor Univ., B.A.

Cronin, Emma ......................................... Dean of Instructional Support Services
Univ. of Oklahoma, B.A.; Univ. of North Texas, M.L.S.; Further study: East Texas State Univ., Texas Woman's Univ., New Mexico Highlands Univ.

Dale, Charles W. ...................................... Electronics
Southeastern State College of Oklahoma, B.S.; Southern Illinois Univ., M.S.; East Texas State Univ., Ed.D.

Dennis-Monzingo, Vivian ........................... Mathematics
East Texas State Univ., B.A., M.S., Ed.D.; Further study: Univ. of North Texas

Dye, Arch ............................................. Electronics
Mountain View College, A.A.S.; Univ. of Texas at Dallas, B.S.;
Texas A&M, Commerce, M.S.

Egedigwe, Eges ..................................... Computer Information Systems
Univ. of Ife (Nigeria), B.S.; Atlanta Univ., M.S., M.B.A.; Further study: Michigan State Univ., Univ. of North Texas

Elke, Marvlin ......................................... Dean of Financial Affairs & Information Systems
Abilene Christian University at Dallas, M.S.

Erwin, Robert J. ...................................... Theatre
Univ. of South Florida, B.A.; Univ. of Alberta, M.F.A.; Further study:
Paul Mann's Acting Workshop, New York City

Etheredge, John W. .................................. Speech
Baylor Univ., B.A., M.S.; Further study: Univ. of Houston, Baylor Univ., Texas A&M Univ.

Falls, Nancy ............................................. Assistant Director of Admissions
Univ. of Oklahoma, B.S.; Southern Methodist Univ., M.A.

Felder, Bob ............................................. Economics
Sam Houston State Univ., B.A., M.A.

Flickner, Robert E. .................................. Physical Education
Bethel College, B.S.; Kansas Univ., M.S.; Further study: Depaul Univ., Chapman College, Univ. of North Texas, Southern Methodist Univ., M.P.A.;
Univ. of North Texas, Ed.D.

Gammage, Judy K. ................................... Computer Information Systems
Southern Methodist Univ., B.A., M.A.; Univ. of North Texas, Ph.D.

Greely-Miller, Mary H. ............................ Director of Student Advising Services
Univ. of Rochester, B.A.; State Univ. of New York College at Brockport, M.S.; Further study: Univ. of Buffalo, State Univ. of New York

Grigsby, Linda ....................................... Dean, Workforce and Continuing Education
Abilene Christian Univ., B.S., M.S.; Univ. of North Texas, M.S.

Hegar, E. Atlene ..................................... Psychology
Tech Tex, B.A.; Univ. of North Texas, M.Ed., Ed.D.

Helton, Charles E. .................................... Director of Apparel Center
East Texas State Univ., B.S.; Further study: East Texas State Univ.

Henry, Robert ......................................... Physical Education
Southern Methodist Univ., B.A.; Univ. of Illinois, M.S.; Further study:
Univ. of Texas, Univ. of North Texas, East Texas State Univ., Texas Tech Univ., Texas A&M Univ.

Henson, Jerry C. ........................................ History/Religion
Hardin-Simmons Univ., B.A.; Southeastern Baptist Theological Seminary, B.D.; Baylor Univ., Ph.D.

Hill, H. Rayburn ..................................... Government
Paris Junior College, A.A.; East Texas State Univ., B.S., M.S.;
Further study: Univ. of Oklahoma, East Texas State Univ.

Holman, Morris H. .................................... History
East Texas State Univ., B.A., M.A.; Dallas Theological Seminary, M.A.B.S.; Further study: Univ. of North Texas

Howell, Constance ................................. Director of Institutional Research
Pan American Univ., B.A.; Univ. of Texas at Dallas, M.A.

Hutchins, Michael E. ............................ Computer Aided Design & Drafting
East Texas State Univ., B.S., M.S., Ed.D.

Jackson, JoAnn ....................................... Counselor
Bishop College, B.A.; Prairie View A&M, M.Ed.; Further study:
East Texas State Univ.

Jacquez, Mary Alice .................................. Counselor
Eastern New Mexico Univ., B.S., M.A.; Further study: Amber Univ.,
East Texas State Univ.

Janes, Irene .......................................... Continuing Education Program Director
Univ. of Dallas, B.A.

Jeffus, Larry ........................................... Air Conditioning and Refrigeration
Hawahse College, A.A.; Univ. of Tennessee, B.S.; Further study:
Univ. of Tennessee

Jenkins, Curt ......................................... Automotive Technologies Program Director
Univ. of Dallas, B.S., Texas A&M Univ at Commerce, M.S.

Jensen, Denny H. .................................... English as a Second Language
Univ. of Illinois, B.A.; Teacher's College, Columbia Univ., M.A.

Jessen, Joel A. ....................................... Human Development
Univ. of Iowa, B.A., M.A.

Jones, Jim ............................................. Vice President of Business Services
Univ. of Texas at Arlington, B.B.A.; Amber Univ., M.S.

Joseph, Betty ......................................... English
Univ. of North Texas, B.A.; Univ. of North Texas, M.A.

Jurtzhe, Stanney ...................................... Government
El Centro College, A.S.; Eastern New Mexico Univ., B.S., M.A.;
The Ohio State Univ., M.A.; Clark Atlanta Univ., Ph.D.

Keenan, Donnellen ................................. Developmental Writing
Univ. of North Carolina at Chapel Hill, B.A.; Univ. of Oklahoma, M.Ed.;
Kellogg Institute, Appalachian State Univ., Developmental Specialist; Further Study: Univ. of North Texas, Univ. of Oklahoma

Kelley, Kate .......................................... Director of Human Resources
Univ. of Mary Hardin-Baylor, B.S.; Further study: Univ. of Mary Hardin-Baylor, Institute for Applied Management and Law

Kirkpatrick, James Michael ....................... Computer Aided Design & Drafting
Oklahoma City Univ., B.A., Univ. of North Texas, M.Ed., Ed.D.

Knight, Carl E. ....................................... Biology
Michigan State Univ., B.S., M.S., Ph.D.

Kozlowski, Gerald .................................. Dean, Communication Arts and Applied Technologies
Eastfield College, A.A., A.S.; Univ. of North Texas, B.A.

East Texas State Univ., M.S.; Further study: Univ. of North Texas, Spanish Language Institute

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EL CENTRO COLLEGE

EI Centro, a college of the Dallas County Community College District, is centrally located in downtown Dallas and has played a vital role in its educational advancement for the past 30 years.

EI Centro's central location allows students from all parts of Dallas County to take advantage of pre-professional courses transferable to four-year institutions, as well as career training in over 40 exciting fields. There is no typical student at EI Centro. Students are of all ages and come from all walks of life.

The campus has gained international attention for making use of a nine-story, turn-of-the-century department store, renovated to accommodate classrooms, laboratories, computer technology, student center, learning center, and administrative offices, as well as labs, arts facilities, gymnasium, and library. Nestled between the two wings is an inviting green space which has been commended for beautifying the downtown area.

Accreditation

EI Centro College is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award the Associate of Arts and Sciences Degree and the Associate of Applied Science Degree.

Institutional Memberships

EI Centro belongs to The American Association of Community Colleges; The Association of Texas Colleges and Universities, and The League for Innovation in the Community College.

EI Centro College is recognized and sanctioned by the Texas Higher Education Coordinating Board and the Texas Education Agency and is an affirmative action, equal opportunity institution.

DCCCD Statement of Purpose

The purpose of the DCCCD is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for development of intellectual skills, job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve.

Mission

EI Centro College: at the forefront of education, serving the community in an urban, multicultural setting.

Purpose

In keeping with the mission, the purpose of EI Centro College is to provide:

- Freshman and sophomore courses in arts and sciences;
- Workforce education programs leading to associate degrees or certificates;
- Continuing adult education programs for occupational or cultural enrichment;
- Workforce development programs designed to meet local and statewide needs;
- Education programs designed to fulfill the commitment of an admission policy allowing the enrollment of underprepared students;
- Ongoing counseling and guidance designed to assist students in achieving their individual educational goals;
- Adult literacy and other basic skills programs; and
- Such other purposes as may be prescribed by the Texas Higher Education Coordinating Board or local governing boards in the best interest of post-secondary education in Texas.

*Purpose is adapted from Texas Education Code 130.003e.

STUDENT AND CAMPUS SERVICES

<table>
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<tr>
<td>Admissions/Registrar</td>
<td>214-860-2311</td>
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<td>Adult Resource Center</td>
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<td>Assessment Center</td>
<td>214-860-2178</td>
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<tr>
<td>Bookstore</td>
<td>214-860-0461</td>
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<td>Campus Main Line/Information</td>
<td>214-860-2037</td>
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<td>Campus Police</td>
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<td>Cashier</td>
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<td>Continuing Education</td>
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## EL CENTRO COLLEGE ADMINISTRATION

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<tr>
<td>President</td>
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<td>214-860-2101</td>
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<tr>
<td>College Vice President</td>
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<td>214-860-2019</td>
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<tr>
<td>Vice President, Administrative Services</td>
<td></td>
<td>214-860-2041</td>
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<tr>
<td>Assistant to College Vice President</td>
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<td>214-860-2419</td>
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<tr>
<td>Dean of Students</td>
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<tr>
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<td>Admissions Advisor, International Programs</td>
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## INSTRUCTIONAL DIVISION DEANS

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<tr>
<th>Division</th>
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<tr>
<td>Arts and Sciences</td>
<td>Betty Moran</td>
<td>214-860-2392</td>
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<td>Business and Public Service</td>
<td>Allen Espree</td>
<td>214-860-2202</td>
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<td>Communications/Math/Student Support Services</td>
<td>Micheal Jackson</td>
<td>214-860-2247</td>
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<td>Health/Legal Studies/Continuing/Workforce Education</td>
<td>Sondra Flemming</td>
<td>214-860-2146</td>
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## EL CENTRO COLLEGE FACULTY AND STAFF

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>School/Institution</th>
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<tbody>
<tr>
<td>Abbott, Kristi</td>
<td>Instructional Associate, Continuing/Workforce Education</td>
<td>Texas Tech University, B.S.</td>
<td>AD Nursing</td>
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<tr>
<td>Adegbola, Maxine A.</td>
<td>AD Nursing</td>
<td>Hunter College CUNY, Diploma; CUNY, M.S.N.</td>
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<tr>
<td>Adege, Daffy G.</td>
<td>Research Associate</td>
<td>Adis Ababa University, B.S.</td>
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<tr>
<td>Alfaro, Felicitas</td>
<td>Dean of Students</td>
<td>Incarnate Word College, B.S.; Antioch College, M.Ed.</td>
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<tr>
<td>Allen, Benja</td>
<td>Biology</td>
<td>Baylor Univ., B.A.; North Texas State Univ., M.S. M.Ed.</td>
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<tr>
<td>Allen, Velma</td>
<td>Academic Advisor</td>
<td>Baylor Woman's University, B.S.</td>
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<tr>
<td>Ames, Lola E.</td>
<td>AD Nursing</td>
<td>Bronson School of Nursing, Diploma; Michigan State University, B.S.N.; U.T.A., M.S.N.</td>
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<tr>
<td>Anderson, Eva D.</td>
<td>AD Nursing</td>
<td>Baylor Univ., B.S.N.; Texas Woman's Univ., M.S.</td>
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<tr>
<td>Andrews, Phyllis D.</td>
<td>Associate Dean, Continuing/Workforce Education</td>
<td>Univ. of Texas Southwestern Medical Center-Dallas, B.S.; Amber University, M.S.;</td>
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<td>Anthony, Michael</td>
<td>Fashion Design</td>
<td>Indiana Univ., B.A.</td>
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<td>Armstrong, Dean</td>
<td>Drama, Humanities</td>
<td>Eastern New Mexico Univ., B.S.; Southwest Texas State Univ., M.A.</td>
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<td>Arnold-Roquemore, Brenda J.</td>
<td>AD Nursing</td>
<td>Texas Woman's Univ., B.S., M.S.</td>
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<td>Barnes, Monica T.</td>
<td>Special Populations Advisor, Continuing/Workforce Education</td>
<td>Univ. of Southern Mississippi, B.S.; Jackson State Univ., M.S.</td>
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<tr>
<td>Barmhart, William G.</td>
<td>Accounting</td>
<td>Lamar Univ., B.B.A.; Western State College of Colorado, M.A.</td>
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<td>Bates, Barry L.</td>
<td>Biology</td>
<td>Stephen F. Austin Univ., B.S., M.S.</td>
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<td>Beasley, Sharmar</td>
<td>Legal Assistant</td>
<td>Univ. of Texas At Austin, B.A.; Southern Meth. Univ., M.L.A., M.A.</td>
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<tr>
<td>Becker, Joan T.</td>
<td>AD Nursing</td>
<td>Hunter College, B.S.N., New York Univ., M.A.</td>
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<tr>
<td>Beecham, Jessie Y.</td>
<td>AD Nursing</td>
<td>Univ. of Texas Health Science Center - San Antonio, B.S.N., M.S.N.</td>
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<tr>
<td>Bell, Mildred J.</td>
<td>Counselor/Development</td>
<td>Pratteview &amp; Career College, B.A.; Texas Southern Univ., M.Ed.;</td>
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<tr>
<td>Bowell, Cassandra</td>
<td>Math/Developmental Math</td>
<td>Lamar Univ., B.B.A.; East Texas State Univ., M.B.A.</td>
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<tr>
<td>Bradford, Demetria</td>
<td>Director of Assessment Center</td>
<td>Atlanta Baptist Univ., B.A.</td>
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<td>Bradley, LaVerne E.</td>
<td>AD Nursing</td>
<td>Tuston College, B.A.; Texas Woman's Univ., M.S.</td>
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<tr>
<td>Bransome, Darlene J.</td>
<td>AD Nursing</td>
<td>Univ. of Pennsylvania-Pittsburgh, B.S.; Texas Woman's Univ., M.S., Ph.D.</td>
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<tr>
<td>Bread, Aubrey H.</td>
<td>Radiologic Sciences</td>
<td>Pfeiffer School of Radiologic Technology, R.T. (R), A.R.T., Amber University, B.S.; Ablone Christian University, B.S.; East Texas State Univ., M.S.</td>
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<tr>
<td>Bryant, Jan.</td>
<td>Diagnostic Medical Sonography</td>
<td>Univ. of Texas Health Science Center, B.S., R.T. (R), A.R.T., R.D.M.S.; North Texas State University, M.S.</td>
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</tbody>
</table>
Minnett, John .................................. Respiratory Care
El Centro College, A.A.S.; Stephen F. Austin State Univ., B.S.
C.R.T.T., R.R.T., R.C.P.

Minnis, Rosalinda .................................. Counselor, Human Development
El Centro College, B.A.A.; East Texas State Univ., B.S.;
Amherst Univ., M.A.

Moeck, Pete ..................................... Program Director, Medical Assisting
Baylor Univ., B.A.; Univ. of Dallas, M.B.A.
Certified Medical Assisting (AAMA)

Moore, Janice E. ...........................................
M.B.A.

Morgan, Charlie ...........................................

Ogleaby, Neeley-Plog, Claudia, Computer Information Systems
Texas Woman's Univ., B.S.; Texas A&M Univ., B.S.

Moriarty, Kathleen ..................................... Invasive Cardiovascular/Eccociology Technology
Indiana Univ., A.S.; B.S.; Purdue Univ., B.S.; Kansas State Univ., M.S.;
RT (R) (CV) RCVT, R.C.S.

Myers, H. Wayne ...........................................
B.S., M.Ed.

Neeley-Plog, Claudia ..................................... Computer Information Systems
Texas A&M Univ., B.S.; improve Central States Univ., M.S.
Certificate of Data Processing, E.C.P.; East Texas State Univ., M.S., Ed.D.

Oliver, Allen ............................................. Interior Design
Univ. of North Texas, B.A.

Oston, Carol M ............................................. Legal Assistant
Texas Tech Univ., B.S.; Southern Methodist Univ., M.A.; Univ. of
Houston Law Center, J.D.

Osada, Kimberly ...........................................
B.S., M.Ed.

Page, Jean ............................................. Counselor/Human Development
North Texas State Univ., B.S., M.Ed., Ed.D.

Peschka, Gary L ..........................................
Respiratory Care
Univ. of Missouri, Columbia, B.S.; Univ. of Illinois, Champaign, B.S., M.R.T.

Pollard-Bratcher, Jennis .................................. Assistant, Continuing/Workforce Education
Prairie View A&M Univ., B.S., M.S.

Pokey, Pamela J ...........................................
Medical Transcription
Univ. of North Texas, B.A., C.M.T.

Poynca, Gene E ...........................................
Graduate, Texas Southern Methodist Univ., B.F.A., M.L.A.

Powers-Prather, Ann ..................................... AD Nursing
Paris Junior College, A.A.N.; Univ. of Texas at Arlington, B.S.N.,
M.S.N.; Univ. of North Texas, Ph.D.

Pritchett, Kathy ...........................................
AD Nursing
Incarnate Word College, B.S.; Texas Woman's Univ., M.S.

Ramsey, George E ...........................................
Spanish
Southern Methodist Univ., B.A.; Texas Christian Univ., M.A.

Reding, Diana ............................................. AD Nursing
Hardin College, B.S.; East Texas State Univ., M.S.

Richard, Calvin ...........................................
Chief of College Police
Eastfield College, A.A.S.

Riehl, Gretchen K ...........................................
Assistant Dean, Continuing/Workforce Education
Univ. of Texas at Arlington, B.S., B.S.;
Texas Woman's Univ., M.S.

Robinson, Emily B ...........................................
Office Technology
Abilene Christian Univ., B.S.E.; Univ. of North Texas, M.B.E.

Rodriguez, Freddy ...........................................
Assistant, TRIO Program
California State Univ., B.S.; Texas Woman's Univ., M.S.

Richard, Sean ............................................. Director, Professional Tech. Educ. (Mexico), Productivity

Rodriguez, Joan ............................................. Reading
Baylor College, Florida, B.A.; M.A.; New Mexico State, Ed.D.

Routh, Brenda F ...........................................
AD Nursing
California State Univ., B.S.; California State Univ., M.S.

Rouze, Pamela K ...........................................
Developmental Reading
North Texas State Univ., B.A.; Texas Woman's Univ., M.Ed.

Roye, James ............................................. Instructional Associate, Learning Center
North Texas State Univ., B.S.

Samarath, Aditi ...........................................
Director, Learning Center
Texas Tech Univ., B.F.A., M.A.

Samuel, John ............................................. Computer Information
Univ. of Texas at Arlington, B.B.A., M.B.A.; American Production &
Inventory Control Society, Certified in Production and Inventory
Management, C.P.I.M.

Schmitt, Justine H ...........................................
AD Nursing
Univ. of Michigan-Ann Arbor, B.S.N.; Texas Woman's Univ., M.S.N.

Schuster, Patrick ..........................................
Criminal Justice
Univ. of Texas at Arlington, B.A.

Seaton, Norman ...........................................
Computer Information
Univ. of Piano, B.A.; Univ. of Dallas, M.B.A., Nova University, Ed.D.

Smith, Deborah A ...........................................
Vocational Nursing
Harper Hospital School of Nursing - Diploma; Texas Woman's Univ., B.S., M.S.

Sonnier, Beth B ............................................. Director, Food and Hospitality Service Institute
Culinary Institute of America, A.O.S., Univ. of North Texas, B.S.

Sowers, William J ...........................................
Workforce Education
St. Joseph's Univ., B.S.; Delaware State College, B.S.D.E.;
Temple Univ., Ed.M.

Speyerer, Carol ...........................................
AD Nursing
Inarnate Word College, B.S.; Texas Woman's Univ., M.S.; Nova
Univ., Ed.D.

Stahl, Dana ............................................. AD Nursing
Oklahoma Baptist Univ., B.S.; Texas Woman's Univ., M.S.

Steindam, Angela ...........................................
Instructional Associate, Learning Center
Univ. of Texas at Arlington, B.A.

Stewart, Stevie ............................................. Director, Admissions/Registrar
Univ. of Texas at El Paso, B.A., M.A.

Strain, Donna ............................................. Developmental Mathematics/Mathematics
Southwestern State College, B.A.; Texas Woman's Univ., M.S.

Trotter, Robert S., Jr. ..................................... AD Nursing
Baylor Univ., B.S.N.; Texas Woman's Univ., M.S.

Theriot, Lisa ............................................. Associate Dean, Resource and Workforce Development
Illinois State Univ., B.A., Amber, M.S.

Tippit, Linde L ............................................. Librarian
Univ. of Texas, B.A., M.LIS.

Tolentino, Albert E ..................................... Counselor/Health and Legal Studies
New Mexico Highlands Univ., B.A., M.A.

Trammell, Deborah ..................................... AD Nursing
Univ. of Virginia, B.S.N.; Univ. of Texas at Arlington, M.S.N.

Tucker, Robert G. ...........................................
Government
Univ. of Texas, B.A.; North Texas State Univ., M.Ed., Ed.D.

Tully, Betty L ............................................. Counseling and Urban Education Faculty/Ombudsman
Our Lady of the Lake College, B.A., M.Ed.; East Texas State Univ.,
Ed.D.

Turley, Uralinda ............................................ Director, Gear Up Program
Southern Methodist Univ., B.F.A.

Turner, Susan J ............................................. Dean, Educational and Administrative Technology
Univ. of Texas, M.S.; Univ. of Texas at Arlington, B.S.;
Cedar Valley College, A.A.S.

Urday, Iris ............................................. AD Nursing
Univ. of Southern Mississippi, B.S.N.

Waddie, Laura ............................................. AD Nursing
Texas Woman's Univ., B.S., M.S.

Warrick, Frances ...........................................
Vocational Nursing
College of St Frances, M.S., Texas Woman's Univ., B.S., R.N.

Wells, John W ............................................. Director, Financial Aid
Univ. of Nevada at Reno, B.S., Ed.

Williams, Joe Elta .................................... Instructional Specialist, Continuing/Workforce Education
William & Mary, Virginia, B.A., M.Ed., Associate, Computer Information Systems
El Centro College, A.A.S.

Wilson, Doris P ............................................ Office Technology
Prairie View A&M Univ., B.S.; Teachers College, Columbia
Univ., M.A.

Woolridge, Sharon K ..................................... Interior Design
El Centro College, First Professional Degree Level Certificate,
Interior Design; Southern Methodist Univ., B.A., M.L.A.

Yearwood, Jessie ..........................................
Food and Hospitality Institute
Concord College, B.A.; Texas Woman's Univ., B.S., M.S., M.Ed.

Youmans, Linda A ...........................................
AD Nursing
John Peter Smith Hospital School of Nursing, R.N.; Univ. of Florida,
B.S.N.

Young, Duane ............................................. Program Director, CPTPD, Continuing/Workforce Education
University of Washington, C.D.P.

Young, Jerry ............................................. Instructional Associate, Microbiology
Southwestern Oklahoma State Univ., B.S., R.Ph.

Zarete, Esperanza ...........................................
Program Director, Continuing/Workforce Education
El Centro College, A.A.S.
Statement of Purpose

The purpose of the Dallas County Community College District is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. The District does this by providing accessible, accreditated, affordable, cost-effective, quality educational opportunities for development of intellectual skills, job skills; personal growth, and/or transfer to a baccalaureate program. In fulfilling our purpose, the District furthers cultural, economic and workforce development in the communities served. In all our efforts, the District strives to meet the needs and exceed the expectations of those the District serves.

Mountain View College Mission Statement

Mountain View College is a comprehensive community college dedicated to delivering excellence in education, encouraging intellectual and personal growth, and fostering new ideas which meet the aspirations of students and communities.

Since beginning in 1970 as the second of seven Dallas County Community College District campuses, Mountain View College has continued to serve as the center of learning for thousands of people in southwestern Dallas County including Oak Cliff, Duncanville, Cedar Hill, and parts of Grand Prairie. Mountain View meets a broad range of educational needs by providing a variety of academic, technical, cultural, and recreational programs.

The Mountain View student body is comprised of a cross-section of the community represented by different ages and backgrounds. Students enjoy an enriching academic atmosphere surrounded by the natural setting of a 200-acre campus. The college's long, horizontal buildings gracefully blend in with the campus' natural environment of rocky ravines, native plants and trees, and a winding creek. Two glassed-in pedestrian bridges connect the east and west complexes and provide a spectacular view of the area.

Programs

Mountain View offers associate degrees in arts and sciences which meet freshmen and sophomore course requirements for a bachelor's degree at four-year colleges and universities. Additionally, Mountain View provides technical and occupational preparation training for individuals entering the workforce. The college also offers hundreds of Continuing Education programs for students of all ages to enrich their lives through workshops, seminars and short-term classes in pursuit of cultural awareness, leisure-time activities, and personal and professional growth.

Mountain View addresses the educational needs of business and industry through its Contract Training Services Office. Seminars, workshops, and courses are tailored to a company's requirements, either on campus or at the workplace. Training can be provided at a time that is convenient for employees, in either a credit or non-credit format.

Mountain View also offers the following:

- Honors courses and an Honors Scholar Program;
- Life Transitions Program for adults returning to college;
- Intercollegiate athletics for the student athlete;
- Learning Skills Center to assist with tutorial services in developmental reading, writing, math, and study skills;
- Student Programs and Resources to enhance the total college experience with numerous student clubs and organizations, performing arts presentations, vocal and instrumental concerts, art exhibits, lecture series, intramural sports, and many other opportunities for cultural and recreational experiences.

Accreditation and Institutional Membership

Mountain View College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award associate degrees, and is recognized and sanctioned by the Texas Higher Education Coordinating Board and the Texas Education Agency. Mountain View College is a member of numerous organizations, including the American Association of Community Colleges, COMBASE, and the League for Innovation in the Community College.
MOUNTAIN VIEW COLLEGE ADMINISTRATION

President ................................................................. Monique Amerman .......................... 214-860-8700
Interim Vice President of Teaching and Learning .......... Richard McCrory ............................. 214-860-8854
Executive Dean, Arts and Sciences ............................ Allatia Harris ................................. 214-860-8736
Executive Dean, Learning Support Services ................. Margot Hirsch ..................................... 214-860-8588
Executive Dean, Workforce Development, Interim .......... William Drake ................................. 214-860-8616
Assistant Dean, Arts and Sciences ............................ Bonnie Hueston ............................... 214-860-8537
Assistant Dean, Business and Technology .................. Lawrence Davis ............................. 214-860-8511
Dean, Continuing Education and Contract Training ....... David Hardy .................................... 214-860-8605
Dean, Evening and Weekend Instructional Services ....... David Hardy .................................... 214-860-8610
Assistant Dean, Continuing Education and Contract Training ......... Sharon Glenn .......................... 214-860-8615
Dean, Resource Development ................................. Michael Gutierrez ............................ 214-860-8711
Dean, College Computing and Educational Resources ....... Jim Convey ..................................... 214-860-8525
Dean, Financial Services ...................................... Sharon Davis ..................................... 214-860-8705
Director, Enrollment Management/Registrar, Interim ...... Glenda Hall .................................. 214-860-8600
Director, Financial Aid .......................................... Glenda Hall ........................................ 214-860-8688
Director, Institutional Effectiveness ......................... Barbara Jones .................................... 214-860-8735
Director, Public Information .................................. Sarah Cooper Reavis ........................ 214-860-8887
Director, Student Programs and Resources ............... Henry Adkins .................................. 214-860-8665

INSTRUCTIONAL DEPARTMENT CHAIRS

Cultures and Communication ................................ Juan Baldor ...................................... 214-860-8792
Development Studies ........................................... Spencer Olesen ............................... 214-860-8783
English ................................................................ Geoff Grimes ........................................ 214-860-8783
Fine Arts ................................................................ Larry Felty ........................................... 214-860-8632
Math ..................................................................... Jagjit Buttar ........................................ 214-860-8777
Science/Physical Education .................................. Margaret Silva ................................ .... 214-860-8839
Social Science ....................................................... Larry Pool ........................................... 214-860-8671

MOUNTAIN VIEW COLLEGE FACULTY AND ADMINISTRATORS

Adkins, Henry ...................................................... Director, Student Programs and Resources
Dallas Baptist Univ., B.S.; North Texas State Univ., M.P.A.

Allen, Kenneth G. ............................................. History
Creighton Univ., B.A., M.A.; George Washington Univ., M.P.H., Ph.D.

Allen, Gemmy .................................................. Management
Univ. Of Texas, Arlington, B.B.A.; Univ. of North Texas, M.B.A.

Amerman, Monique ............................................ President
Colorado College, B.A., M.A.; Univ. of Colorado, Ph.D.

Baldor, Juan A. .................................................... Spanish
Mountain View College, B.A.; Univ. of North Texas, B.A.; Univ. of Dallas, M.A.

Barakat, Moel .................................................... Visiting Scholar, Math
Univ. of Texas at Dallas, B.S.

Battles, Fred ..................................................... Physical Education
Kigore Jr. College, A.A.; Baylor Univ., B.S., M.S.; Univ. of North Texas, Ed.D.

Beatty, Cathy ..................................................... Director/Faculty, Health Information Program
Regulated Health Information Administrator
Southwest Texas Junior College, A.A.; Texas Woman’s Univ. B.S.

Benson, Paul F. .................................................. English/Religion
Pacific Lutheran Univ., B.A.; Colorado State Univ., M.A.; Univ. of North Texas, Ph.D.

Brumley, Ronald P. ............................................... Drafting
Colorado Teachers College, B.S.; Univ. of North Texas, M.S.

Butler, Jagitt ..................................................... Visiting Scholar, Math
Univ. of Michigan, B.S.M.E.; Baylor Univ., M.B.A.

Cardwell-Cannon, Janet .................................... Graphics Director
Univ. of Oklahoma, B.A.; Univ. of North Texas, M.S.

Cardwell-Kennedy, Leileane E. ............................. Reading
Bishop College, B.S.; Southwestern State College, M.Ed.

Camacho, Luis .................................................. Our Lady of the Lake Univ., B.A., M.B.A.

Castille, Nancy Jones ......................................... English
Texas A&M Univ. at Commerce, B.A., M.A.; Univ. of North Texas, Ph.D.

Chancey, Greg .................................................. Mathematics
Univ. of Texas, Arlington, B.S., M.S.

Clarke, Curtis R. ................................................ Economics
Southern Methodist Univ., B.B.A., M.B.A.

Coad, Bruce ..................................................... English

Wittenburg Univ., B.A.; Univ. of North Carolina, M.A.; Duke Univ., Ph.D.

Cook, E. Wayne ................................................ Philosophy/English
Hardin-Simmons Univ., B.A.; Texas Tech Univ., M.A., Ph.D.

Cortez, Lionel, M., Jr ........................................ Counselor
Univ. of Texas, Austin, B.A.; Our Lady of the Lake College, M.Ed.

Davis, David M. ............................................... Computer Science/Computer Information Systems
Ouachita Baptist Univ., B.S.; Univ. of Arkansas, M.A.

Davis, Lawrence .............................................. Assistant Dean, Business Technology
Univ. of Oklahoma, B.A.; Oklahoma City Univ., J.D.

Davis, Sharon .................................................. Dean, Financial Services
Univ. of Arkansas, B.S.; Dallas Baptist Univ., M.B.A.; Univ. of Dallas, M.M.

Dean, Sherry .................................................... French/Speech Communication
Asbury College, B.A.; Univ. of Texas, Arlington, M.A.

Darsham, Don .................................................... Computer Information Systems
Colorado State Univ., B.S.M.E.; Amber Univ., M.S.

Drake, William .................................................. Interim Executive Dean, Workforce Development
Bishop College, B.A.; Sam Houston St. Univ., M.A.

Duval, Johnny W. ............................................. Mathematics
East Texas State Univ., B.S.; Univ. of Illinois, M.A.

Elliott, Harry J. .................................................. Visiting Scholar, Economics
Baylor Univ., B.B.A.; Michigan State Univ., M.A.

Feltty, Larry T. .................................................. Art
East Texas State Univ., B.S., M.S.

Ferguson, Susan French ...................................... English
Univ. of Dallas, B.S.; Univ. of North Texas, M.A., Ph.D.

Fletcher, Ann .................................................... Counselor
DePauw Univ., B.A.; Univ. of Houston, M.Ed.

Franklin, Janice ............................................... Music/Theatre
Stephen F. Austin Univ., B.M.A., M.A.

Fulton, Stan ..................................................... Electronics
Univ. of Arkansas, B.S.E., M.Ed.; East Texas State Univ., Ed.D.

Glenn, Sharon L ................................................ Assistant Dean, Continuing Education and Contract Training
Univ. of North Texas, B.S.Ed.; East Texas Univ. M.S.Ed.

Goss, Ray ........................................................ Counselor
Prairie View A&M College, B.S.; East Texas State Univ., M.S.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Department</th>
<th>Education Details</th>
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<tr>
<td>Grimes, Geoffrey A.</td>
<td>English</td>
<td>Austin College, B.A.</td>
<td>Texas Tech Univ., M.A., Ph.D.</td>
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<tr>
<td>Grissom, Anna</td>
<td>Speech Communication</td>
<td>Baylor Univ., B.A., M.A.</td>
<td>Univ. of North Texas, Ph.D.</td>
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<tr>
<td>Guerra, Martin</td>
<td>English for Speakers of Other Languages</td>
<td>University of Dallas, B.A., Developmental Studies</td>
<td>Texas A&amp;M University, B.A.</td>
</tr>
<tr>
<td>Gutierrez, Michael</td>
<td>Dean, Resource Development</td>
<td>Princeton Univ., B.A.</td>
<td>Univ. of Texas, Austin, M.P.A.</td>
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<td>Hall, Glenda</td>
<td>Director, Financial Aid</td>
<td>Univ. of North Texas, B.S.</td>
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<td>Hall, J.</td>
<td>Dance Studies</td>
<td>American Univ., Univ. of Texas, Dallas</td>
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<td>Hamilton, Ramona</td>
<td>Office Careers</td>
<td>Mount, Georg R.</td>
<td>Psychology</td>
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<td>Hardy, David</td>
<td>Dean, Continuing Education and Contract Training</td>
<td>Southern Methodist Univ., B.F.A.; Amber Univ., M.S.</td>
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<td>Harris, Alliata</td>
<td>Executive Dean, Arts &amp; Sciences</td>
<td>Univ. North Texas, B.A., M.A.</td>
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<td>Hawkins, Vernon</td>
<td>Computer Information Systems</td>
<td>Oklahoma State Univ., B.S.; Amber Univ., M.B.A.</td>
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<td>Hegar, Kathryn W.</td>
<td>Management</td>
<td>Univ. of North Texas, B.A., M.B.E., Ph.D.</td>
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<td>Hettis, Mark</td>
<td>Music</td>
<td>Univ. of North Texas, B.M., M.Ed.</td>
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<td>Hirsch, Margot</td>
<td>Executive Dean, Learning Support Services</td>
<td>Univ. of Texas, Austin, B.A.; Univ. of North Texas, M.Ed.; Univ. of North Texas, Ph.D.</td>
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<td>Hueston, Bonnie</td>
<td>Assistant Dean, Arts and Sciences</td>
<td>Mountain View College, A.A.S.; Univ. of North Texas, B.S.; Amber Univ., M.A.</td>
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<td>Jones, Barbara</td>
<td>Director, Institutional Effectiveness</td>
<td>Texas Christian Univ., B.S.; Amber Univ., M.A.</td>
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<td>Kavaller, Jim</td>
<td>Counselor</td>
<td>Univ. of Oregon, B.S., M.S.</td>
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<td>Keenan, Douglas</td>
<td>Electronics Technology</td>
<td>Eastern Kentucky Univ., B.S., M.S.; Univ. of North Texas, Ph.D.</td>
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<td>Knight, Felicia</td>
<td>Director, Contract Training</td>
<td>East Texas State Univ., B.B.A.</td>
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<td>Knott, Allan</td>
<td>Director, Facilities Services</td>
<td>Univ. of Iowa, A.A.</td>
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<td>Lagg, Larry</td>
<td>Biology</td>
<td>Univ. of Southern Mississippi, B.S.; Northwestern Louisiana State Univ., M.S.; Texas A&amp;M at Commerce, Ed.D.</td>
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<td>Lovelace, Curtis</td>
<td>Electronics Technology</td>
<td>Univ. of Texas, Arlington; Mountain View College, A.A.S.</td>
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<tr>
<td>Martinez, Sylvia</td>
<td>Visiting Scholar, Developmental Studies</td>
<td>Univ. of Puerto Rico, B.A.; Univ. of Texas, Arlington, M.A.</td>
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<td>McCravy, Richard</td>
<td>Vice President, Teaching and Learning</td>
<td>East Texas State Univ., B.S., M.S.; Nova University, Ed.D.</td>
<td></td>
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<tr>
<td>McCloskey, William S.</td>
<td>Geology/Geography</td>
<td>Ohio State Univ., B.S.; Indiana Univ., M.A.T.</td>
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<tr>
<td>Means, Richard L.</td>
<td>History</td>
<td>Henderson State Teachers College, B.A.; Univ. of Arkansas, M.A.</td>
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<td>Melkus, Roger A.</td>
<td>Counselor</td>
<td>St. Thomas Seminary College, B.A.; Creighton Univ., M.S.; Univ. of North Texas, Ph.D.</td>
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<tr>
<td>Moock, Pat.</td>
<td>Teaching/Administrator, Medical Assistant</td>
<td>Baylor, B.A.; Univ. of Dallas, M.B.A.</td>
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<tr>
<td>Mount, George</td>
<td>Psychology</td>
<td>Univ. of Texas, Arlington, B.A.; Univ. of North Texas, Ph. D.</td>
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<td>Oleson, Spencer</td>
<td>Developmental Writing/English</td>
<td>Stephen F. Austin State Univ., B.A.; East Texas State Univ., M.Ed.</td>
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<td>Oliver, Gwendolyn L.</td>
<td>Library Director</td>
<td>Texas Woman's Univ., B.A.; Univ. of North Texas, M.L.S.; Nova Univ., Ed.D.</td>
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<td>Ortega, Diana L.</td>
<td>Office Careers</td>
<td>Univ. of New Mexico, B.S.</td>
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<td>Oxzeher, Billy W.</td>
<td>Sociology</td>
<td>Texas Christian Univ., B.A., M.A.</td>
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<td>Payne, John</td>
<td>Aviation</td>
<td>Univ. of Texas, Arlington, B.B.A.; East Texas State Univ., M.B.A.; Univ. of North Texas, Ph.D.; F.A.A. Airline Transport Pilot; Single and Multi-Engine, Basic, Advanced and Instrument Ground Instructor</td>
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<td>Pool, Larry</td>
<td>History/Government</td>
<td>Stephen F. Austin State Univ., B.S., M.A.</td>
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<td>Reavis, Sarah</td>
<td>Director of Public Information</td>
<td>Tarrant County College, AA; Baylor University, B.S.</td>
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<td>Robinson, Wilma W.</td>
<td>Developmental Reading/English</td>
<td>Savannah State College, B.S.; East Texas State Univ., M.S.</td>
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<td>Rodgers, Samuel A.</td>
<td>Mathematics</td>
<td>Univ. of North Texas, B.A., M.S.; Univ. of Kentucky, Ph.D.</td>
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<td>Roy, Dewayne</td>
<td>Welding</td>
<td>Studies: Oscar Rose Junior College, Eastfield College</td>
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<td>Salter, M. Jo.</td>
<td>Counselor</td>
<td>Southern Methodist Univ., B.A.; East Texas State Univ., M.S.</td>
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<td>Sayers, Lew C.</td>
<td>Developmental Writing/English</td>
<td>Dartmouth College, B.A.; Reed College, M.A.T.</td>
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<td>Silva, Margaret</td>
<td>Visiting Scholar, Science/Physical Education</td>
<td>Mountain View College, A.A.S.; Univ. of Texas, Arlington, B.A.; Texas Woman's Univ., M.S.</td>
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<td>Singleton, Emma</td>
<td>Office Careers</td>
<td>Texas Southern Univ., B.S., M.B.Ed.</td>
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<td>Sink, D. Michael</td>
<td>English</td>
<td>Ball State Univ., B.S., M.A.; Auburn Univ., Ed.D.</td>
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<tr>
<td>Skinner, Ted R.</td>
<td>Librarian</td>
<td>East Texas State Univ., B.S., M.S.L.S.</td>
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<td>Strain, Jimmie F.</td>
<td>Government/History</td>
<td>Univ. of Texas, Austin, B.S.; East Texas State Univ., M.A.; Southern Methodist Univ., M.A.</td>
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<tr>
<td>Tarpley, Joyce K.</td>
<td>Developmental Writing/English</td>
<td>Rutgers Univ., B.A.; Univ. of Texas, Dallas, M.A.</td>
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<tr>
<td>Terry, Joanne</td>
<td>Psychology</td>
<td>Texas Lutheran College, B.S.; Texas Tech Univ., M.A.</td>
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<td>Thompson, Darrell H.</td>
<td>Management</td>
<td>Sam Houston State Univ., B.B.A., M.B.A.</td>
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<tr>
<td>Vance, Pamela</td>
<td>English</td>
<td>Mountain View College, A.A.; Univ. of Dallas, Irving, B.A., M.A.</td>
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<tr>
<td>White, Marjorie A.</td>
<td>Chemistry</td>
<td>Our Lady of the Lake College, B.A.; Univ. of Texas, Austin, M.A., Ph.D.</td>
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<tr>
<td>Wickens, Charles H.</td>
<td>Developmental Mathematics</td>
<td>Kilgore College, A.A.; Univ. of North Texas, B.B.A.; East Texas State Univ., M.S.</td>
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<tr>
<td>Williams, Michelle</td>
<td>Visiting Scholar, Developmental Writing</td>
<td>Paine College, B.A.</td>
<td></td>
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<tr>
<td>Willis, John A.</td>
<td>Management</td>
<td>Univ. of Arkansas, B.S.; Univ. of North Texas, M.B.A.</td>
<td></td>
</tr>
<tr>
<td>Wilson, William A.</td>
<td>Counseling</td>
<td>The City College of the City Univ. of New York, B.A.; Teachers College, Columbia Univ., B.A., Ed.D.</td>
<td></td>
</tr>
<tr>
<td>Wolfe, David J.</td>
<td>Photography/Developmental Writing</td>
<td>Southern Methodist Univ., B.A.; Univ. of California, Los Angeles, M.A.</td>
<td></td>
</tr>
</tbody>
</table>
North Lake College makes educational and cultural opportunities available to all area citizens with its accessible location and active involvement in the community. This commitment to serve the community has resulted in a balance of academic courses, technical programs and continuing education offerings.

Outstanding facilities provide a stimulating and pleasant environment for students, faculty and staff. This combination makes North Lake an exciting center for personal growth for each of its nearly 10,000 students.

North Lake College Mission Statement

North Lake College, created as a part of the Dallas County Community College District in 1977, is a public community college which anticipates and responds to the educational, training, and employment needs of the community. The college prepares people for successful living and responsible citizenship through quality educational programs. We invite dynamic partnerships with all our constituencies: students, community, business and industry, and government; we celebrate a supportive environment in all aspects of the college experience. We are committed to providing equal access and quality learning experiences to a diverse student population in an environment characterized by excellence in service and responsible use of resources.

To accomplish its mission, North Lake College has established the following goals:

- Prepare students to succeed in earning a baccalaureate degree by offering freshman and sophomore transfer courses.
- Provide comprehensive support services and appropriate accommodations to promote the educational, personal, and professional development of all students.
- Prepare students to compete in the workforce through the development of programs that respond to the needs of business and industry.
- Provide life-long learning for occupational, cultural, and personal enrichment.
- Provide literacy and other skills necessary for successful citizenship in a global community.
- Develop partnerships with business, industry, and government entities to help ensure a quality workforce, enhance fiscal responsibility, and promote economic development.
- Increase access to and make optimal use of current technology for students, faculty, and staff.
- Continuously improve systems and processes to more effectively and efficiently utilize human and material resources.

The Campus

Opened in the fall of 1977, North Lake occupies 276 wooded acres in the Las Colinas area of Irving, at 5001 N. MacArthur Boulevard. This architecturally remarkable college is surrounded by gently rolling hills accentuated by a beautiful nine-acre lake. The energy-efficient buildings are designed in a series of terraces which follow the natural elevations of the building site.

North Lake’s excellent facilities include a 450-seat Performance Hall, a 2,000 seat gymnasium, and a covered natatorium, complemented by exceptionally well-equipped laboratories, studios, and learning centers.

Accreditation

North Lake College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the associate degree.

Institutional Memberships:

- The American Association of Community and Junior Colleges
- The Texas Public Community/Junior College Association
- The Texas Association of Colleges and Universities
- The League for Innovation in the Community College

North Lake College is recognized and sanctioned by the Coordinating Board of the Texas College and University System and the Texas Education Agency, and is an Affirmative Action Equal Opportunity Institution.

NORTH LAKE COLLEGE ADMINISTRATION

President………………………………………………………………………..David England………………………………………………972-273-3010
Vice President of Academic & Student Affairs…………………………Martha Hughes………………………………………………972-273-3590
Vice President of Administrative Services…………………………………John Tuohy………………………………………………972-273-3390
Vice President of Planning & Development………………………………Candace Castillo……………………………………………972-273-3015
Special Assistant to the President for Economic Services………………Tom Morton…………………………………………………972-273-3463
Dean of Educational Partnerships………………………………………..Bea Espinoza………………………………………………972-438-6235
Dean of Financial Affairs………………………………………………….Christa Slejko…………………………………………………972-273-3316
Dean of Instruction……………………………………………………….Lee Crowley…………………………………………………972-273-3406
Dean of Instructional & Student Support Services…………………..Chip Ates………………………………………………………972-273-3122
Dean, Resource Development…………………………………………Leslie Mock……………………………………………………972-273-3018
Assistant Dean, Career & Community Education…………………………Tom Fox………………………………………………………972-273-3368
Assistant Dean for Institutional Research……………………………………Teresa Isbell………………………………………………972-273-3392
Director of Admissions/Registrar………………………………………..Steve Twenge………………………………………………972-273-3109
Director/Chief of Police…………………………………………………..Danny Morris………………………………………………972-273-3301
NORTH LAKE COLLEGE ADMINISTRATION (Cont’d)

Director of Facilities Services .................................................. John Hughing 972-273-3353
Director of Financial Aid ........................................................... Paul Felix 972-273-3326
Director of Human Resources ................................................... Ella Barber 972-273-3307
Director of Marketing & Public Information ................................. Janis Browning 972-273-3005
Director of Student Programs & Resources and Health Services ...... Virginia Jones 972-273-3171
Director of Student Technology Center ......................................... Judy Keller 972-273-3424
Director of Testing ...................................................................... Susan Littlejohn 972-273-3161
Director of Academic Advising & Career Services ......................... John Pruitt 972-273-3120
Director, North Lake Community Library ....................................... Lyle Vance 972-273-3419
College Director, School Alliances/Institutional Outreach ................. Detra Craig 972-273-3143
Director, School Alliances ............................................................. Moises Almendarez 972-273-3394
Director, School Alliance-Upward Bound .................................... Guy Melton 972-273-3375
Coordinator of TRIO Program .................................................... Mildred Porchia 972-273-3150
Coordinator, Disability & Supplemental Services ............................ Carole Gray 972-273-3165

INSTRUCTIONAL DIVISION DEANS

Business ......................................................................................... Zena Jackson 972-273-3202
Career & Community Education ..................................................... Jacqueline Makl 972-273-3013
Liberal Arts .................................................................................... Rene Castilla 972-273-3480
Math/Natural Sciences/Sports Sciences ............................................ Bob Agnew 972-273-3500
Visual and Performing Arts .......................................................... David Evans 972-273-3560
Technology ...................................................................................... Paul Kelemen 972-273-3450

NORTH LAKE COLLEGE FACULTY AND STAFF

Agnew, Bob ........................................ Dean, Math/Natural Sciences/Sports Science  North Texas State Univ., B.A., M.A., Ph.D.
Aguilera, Uzo ........................................ Economics Polytechnic of North London, B.A.; University of North Texas, M.S.
Almendarez, Moises ........................................ Director, School Alliance Angelo State University, B.A.
Atia, Clarence ........................................ Dean of Instruction Oakwood College, B.S.; Oklahoma State Univ., M.S.; Univ. of Texas at Austin, Study
Barr, Alvin ................................................ Mathematics Louisiana Tech, B.S., M.S.; University of Mississippi, Ph.D.
Bishop, Joe R. ........................................ English/Developmental Writing North Texas State Univ., B.A.; East Texas State Univ., Study; Univ. of Texas at Dallas, Study; Texas Women’s Univ., Study
Blankenship, Parasy ........................................ Office Careers Texas North State Univ., B.B.A., M.B.E.
Blevins, Larry G ........................................ Electrical Technology Cooke County College, A.A.; Wayland Baptist College, B.S.O.E.
Bravo, Luis ........................................ Accounting Univ. of Arizona, B.A.; Univ. of Texas, B.B.A.; Univ. of Houston at Clear Lake City, M.S.; Univ. of Houston, M.S.; Texas C.P.A.
Briggs, Cathy ........................................ French/Spanish Oklahoma State Univ., B.S.; Univ. of Oklahoma, M.A., Ph.D.
Brink, Lynn ................................................ Government Southwestern Univ., B.A.; North Texas State Univ., M.A.; Nova, Ph.D.
Brownling, Janis ........................................ Director, Marketing & Public Information Southern Methodist University, B.A., M.L.A.
Bryant, Gene ........................................ Computer Information Systems Texas A&M University, B.S., M.S.
Burns, Robert ........................................ Electronics Technology Southwest Texas State Univ., B.S.; Univ. of North Texas, M.A.
Butler, Alice ................................................ Theater North Texas State Univ., B.S.; Stephen F. Austin Univ., M.A.
Castilla, Rene .................................................. Dean, Liberal Arts Castilla State University, B.S.; East Texas State Univ., M.A.
Castillo, Candace ........................................ Vice President of Planning & Development North Texas State, B.S.; East Texas State, M.Ed.
Chamberlain, Enrique K ........................................ Head Librarian North Texas State Univ., B.A.; East Texas State Univ., M.L.S., Ed.D.
Cherry, Grady ........................................ English University of North Texas, B.A., M.A.; Texas Woman’s University, B.S.
Chiles, Andy ........................................ Video Technology University of North Texas, B.A., M.A.; North Texas State Univ., M.S.
Cimnelli, Mary ........................................ Dean, Student Enrollment, Development, & Retention Svcs. State Univ. of New York at Buffalo, B.S.; North Texas State Univ., M.S.
Craig, Detra ........................................ College Director, School Alliances/Institutional Outreach North Lake College, A.A.S.; Dallas Baptist University, B.A.S.
Crowley, Lee ........................................ Dean, Instructional & Student Support Services Lamar Univ., B.S.; Texas A&M Univ., M.Ed., Ph.D.
England, David ........................................ President Univ. of Texas Permian Basin, B.A.; Univ. of Texas Permian Basin, M.A.; Texas A&M, Ed.D.
Elmore, Phytila ........................................ English/Developmental Writing Winthrop College, B.A.; Texas Woman’s Univ., M.A., Ph.D.
Espinosa, Beatriz ........................................ Dean, Educational Partnerships University of Texas Pan American, B.S.; Univ. of Wisconsin-Madison, M.S., Ph.D.
Evans, David ........................................ Dean, Visual & Performing Arts North Texas State Univ., B.S.; M.S.; East Texas State Univ., Ed.D.
Felix, Paul ................................................ Director of Financial Aid/Veteran’s Affairs Univ. of Northern Iowa, M.A.
Fox, Tom P. ................................................ Assistant Dean, Career & Community Education Ohio State Univ., B.A.; Indiana Univ., M.A.
Gittone, Suzanne ........................................ English/Developmental Writing Univ. of Arizona, B.A., M.A., Ph.D.
Gottlieber, Tim ........................................ Computer Info/S. Systems Michigan State Univ., B.S.; University of North Texas, Ph.D.
Gray, Carol ........................................ Coordinating, Disability & Supplemental Services Univ. of Texas-Southwestern Medical Center, B.S.; Texas A&M Univ.-Commerce, M.S.
Hopkins, Sonya ........................................ Speech Texas Tech University, M.A.
Huddleston, Mike ........................................ Biology East Texas State University, B.S., M.S.
Hughes, Martha ........................................ Vice President of Academic & Student Affairs Texas Tech University, B.A., M.A.; Univ. of North Texas, Ed.D.
Hugheh, John ........................................ Director, Facilities Services Univ. of Texas-Austin, B.S.
Hunter, Paul ........................................ English Univ. of Texas, B.A.; Univ. of Florida, M.A.; Univ. of Texas at Arlington, Study
Ice, Pamela ........................................ English Fisher Univ., B.A.; Univ. of Texas at Arlington, M.A.
Irons, Robert ........................................ Management U.S. Military Academy, B.S., Univ. of Arizona, M.B.A.
Isbell, Teresa ........................................ Assistant Dean, Institutional Research Univ. of Texas at Arlington, B.A.; North Texas State Univ., M.Ed., Study

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RICHLAND COLLEGE

A challenging educational experience awaits students at Richland College, where a dedicated faculty, innovative programs, functional campus design and the beauty of nature combine to create an exciting learning environment.

Richland was the fourth of seven colleges in the Dallas County Community College District enrolling its first students in 1972. It has subsequently become the largest DCCCD college, enrolling more than 12,000 college credit students and 8,000 non-credit continuing education students each semester.

A comprehensive curriculum with a variety of flexible formats is offered at Richland including academic transfer programs, career programs and non-credit continuing education courses. In addition, the college offers:

- Fast-track degree program
- Honors courses and an Honors Scholar program
- Global Studies and Global Scholar program
- World Language Division
- Multicultural Center
- Adult Resource Center
- Career Information & Placement Services
- Center for Independent Study
- Disability Services
- American English & Culture Institute

The Campus

Richland is located on 243 acres at 12800 Abrams Road just north of LBJ Freeway. The campus plan enhances the natural beauty of the site. Campus facilities are linked by pedestrian bridges which extend along both sides of a spring-fed creek and two picturesque lakes. Richland has a performance hall, a greenhouse with a demonstration garden, and a planetarium. The campus athletic complex includes an outdoor swimming pool and a fitness center.

Richland College Statement of Purpose

The purpose of Richland College/DCCCD is to equip students for successful living and responsible citizenship in a rapidly changing local, national and world community. We do this by providing accessible, accredited, affordable, cost-effective, quality educational opportunities for the development of intellectual skills, job skills, personal growth and/or transfer to a baccalaureate program. In fulfilling our purpose, we further cultural, economic and workforce development in the communities we serve. In all our efforts, Richland strives to meet the needs and exceed the expectations of those the college serves.

Accreditation

Richland College, of the Dallas County Community College District, is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the Associate of Arts and Sciences degree and the Associate of Applied Science degree.

STUDENT SERVICES

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<tr>
<th>Department</th>
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<tbody>
<tr>
<td>Enrollment Planning</td>
<td>972-238-6108</td>
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<tr>
<td>Advising Center</td>
<td>972-238-3767</td>
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<tr>
<td>Student Records Office</td>
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<td>Accounting Services</td>
<td>972-238-6277</td>
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<td>Adult Resource Center</td>
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<td>Career Information &amp; Placement Center</td>
<td>972-238-6921</td>
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<tr>
<td>Cashier Services</td>
<td>972-238-6206</td>
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<td>College Police</td>
<td>972-238-6911</td>
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<tr>
<td>Center for Independent Study</td>
<td>972-238-6226</td>
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<tr>
<td>Crisis Counseling (pager)</td>
<td>214-332-0794</td>
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<td>Disability Services (Voice/TTY)</td>
<td>972-238-6180</td>
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<td>Emeritus Program</td>
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<td>English as a Second Language Lab</td>
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<td>American English &amp; Culture Institute</td>
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<td>Financial Aid</td>
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<td>Global Studies</td>
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<td>Health Center</td>
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<td>High School &amp; Community Relations</td>
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<td>Honors Program</td>
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<td>International Programs/Studies Abroad</td>
<td>972-238-6301</td>
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<td>Library (LRC)</td>
<td>972-238-6081</td>
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<td>Multicultural Center</td>
<td>972-238-6900</td>
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<td>Student Programs (SPAR)</td>
<td>972-238-6130</td>
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<td>Testing/TASP Information</td>
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INSTRUCTIONAL DIVISIONS

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<th>Director</th>
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<tr>
<td>Business and Professions</td>
<td>Mike Ross</td>
<td>972-238-6210</td>
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<tr>
<td>Human and Academic Development</td>
<td>Mary Darin</td>
<td>972-238-6230</td>
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<tr>
<td>Humanities</td>
<td>George Massingale</td>
<td>972-238-6250</td>
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<tr>
<td>Math/Science/Behavioral Sciences</td>
<td>Ray Canham</td>
<td>972-238-6248</td>
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<tr>
<td>Physical Education</td>
<td>Mike Miles</td>
<td>972-238-6260</td>
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<tr>
<td>World Languages, Cultures, Communications</td>
<td>Jean Conway</td>
<td>972-238-6800</td>
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<tr>
<td>Adjunct Faculty Office</td>
<td>Tom McLaughlin</td>
<td>972-238-6140</td>
</tr>
<tr>
<td>Continuing Education/Workforce Development</td>
<td>Kay Eggleston</td>
<td>972-238-6361</td>
</tr>
<tr>
<td>Skills Training Center/Corporate Services</td>
<td>Mehrdad Haroutunian</td>
<td>972-669-0901</td>
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RICHLAND COLLEGE ADMINISTRATION

President......................................................... 972-238-6364
Vice President for Student Learning.......................... 972-238-6193
Vice President for Student Development......................... 972-238-6202
Vice President for Institutional Advancement................. 972-238-6919
Vice President for Economic Development...................... 972-238-6195
Dean of Educational and Administrative Technology........... 972-238-6381
Dean of Financial Services.................................... 972-238-6036
Dean of Student Support Services............................... 972-238-6140
Dean of Technical Education.................................... 972-238-6190
Dean of Resource Development/Corporate Services............ 972-669-0901
Executive Director, Information Services & College Relations... 972-238-6194

RICHLAND COLLEGE FACULTY AND ADMINISTRATORS

Acree, Patricia ......................................................... Office Technology
Texas Christian University, B.S.; University of North Texas, M.B.E.

Anderson, Loretta C. ............................................... Accounting
Suffolk Community College, A.A.S.; University of Connecticut, B.S.;
Columbia University, M.P.H., M.B.A.; University of New Orleans, M.S.;
CPA, Texas

Archer, Valenda K. .................................................. Executive Director, Information Services
Richland College, A.A.; University of Texas, Arlington, B.A.

Barber, Luke E. ......................................................... Philosophy
Southern Methodist Univ., B.A., M.L.A.; Union Graduate School, Ph.D.

Purdue University, B.A.; Indiana University, M.A.T.

Barrett, John W. ....................................................... English
University of Houston, B.A.; University of Wisconsin, M.A.;
University of Notre Dame, Ph.D.

Beard, Kevin ......................................................... Spanish
Richland Young University, B.A., M.A.

Bell, Michael ......................................................... Biology
East Texas State University, B.S., M.S.

Black, Jane .......................................................... Developmental Writing
East Texas State University, B.A., M.A., Ed.D.

Blackburn, Jo ......................................................... Chemistry
Newcomb College, B.S.; Tulane University, M.S.

Blankenbaker, Zarina ............................................... English as a Second Language
Indiana University, B.S., M.A.

Blaydes, Bart ......................................................... Ornamental Horticulture
Texas Tech University, B.S.; University of Wisconsin, M.S.

Bollin, Patricia ....................................................... Director of Human Resources
- Richland College, A.A.

Bookout, Orl C. ......................................................... Speech
University of Texas, Austin, B.A.; University of North Texas, M.S.

Borchardt, Margaret C. (CPS) ................................... Tech. Ed/Computer Info Systems
University of North Texas, M.Ed.

Branske, Scott dell Llano ............................................. English as a Second Language
Wharton College, B.A.; Southern Methodist University, M.A.

Braun, Barbara ...................................................... Developmental Math
Trinity University, B.A.; University of Kentucky, M.A.;
University of North Texas, Ph.D.

Brown, Eleanor J. .................................................... Developmental Math
Javris Christian College, B.A., East Texas State University, M.S.

Burnham, Weldon S. .................................................. Chemistry
University of California, Los Angeles, B.S.;
Brigham Young University, Ph.D.

Cadenhead, C. T. .................................................... Computer Science/Computer Information Systems
University of North Texas, B.A., M.S.;
Southern Methodist University, M.S., Ph.D.

Canham, Raymond P. ............................................... Division Dean, Math/Science/Behavioral Sciences
University of London, B.Sc.; University of Alberta, Ph.D.

Canine, David B. ..................................................... Vice President, Institutional Advancement
University of Maryland, B.A.;
University of North Carolina, Greensboro, B.S., M.Ed.

Carrillo, Rudy ........................................................ Computer Info. Systems
Western New Mexico University, B.A.

Carter, Perry ........................................................ Education Personnel
Stephen F. Austin State University, B.S., M.Ed.

Chapman, Sydney .................................................... Philosophy
Robert Wesleyan College, B.A.; Michigan State University, M.A., Ph.D.

Chumbley, Richard L. ............................................... Real Estate
Howard Payne University, B.S.; Texas A&M-Commerce, M.Ed.;
Texas A&M University, S.O.A.R.S.; Texas Broker

Clark, Ron .......................................................... Dean, Financial Services
Richland College, A.A.

Clements, Cynthia L. ............................................... Collection Development Librarian
University of Dallas, B.A.; Texas Woman's University, M.L.S.;
University of Texas, Dallas, M.A.

Cobo-Frenkel, Adriana ............................................. Biology
Univ. of Chile, B.S., Ph.D.

Codner, Kay ......................................................... Sociology
Univ. of Texas, Arlington, B.A., M.A.

Collins, Dan ......................................................... Consultant, Life Media
East Texas State University, B.S., M.S.

Conroy, Jean ......................................................... Division Dean, World Lang., Cultures, Comm.
University of North Texas, M.A.

Coronado, Herlinda ................................................. Vice President for Student Learning
University of Texas at El Paso, B.S., M.Ed.; Texas Tech University, Ed.D.

Corrigan, Joe ......................................................... Developmental Reading
Citrus Community College, A.A.; San Diego State University, B.A.;
University of North Texas, M.Ed., Ed.D.

Daniel, Dallas ....................................................... Teaching Admin., Eng/ESOL
University of Texas, Austin, B.A.; M.A.; Ph.D.

Darin, Mary ......................................................... Division Dean, Human & Academic Development
Augustana College, A.B.; University of Texas, Austin, M.Ed.

Davis, Roger Gulon .................................................. History
Union College, B.A.; George Washington University, M.A., Ph.D.

Dawson, Phyllis ...................................................... English
Ouachita Baptist University, B.A.; Memphis State University, M.A.

Dean, Charley ......................................................... Engineering Tech.
Southern Methodist University, B.S.E.E.

DeSefield, Charles H. ............................................... History
Southern Methodist University, B.S.; University of North Texas, M.S.

Dennis, Paula ......................................................... Computer Information Systems
University of North Texas, B.B.A.; MCSE

Doggia, Barbara ..................................................... English as a Second Language
Concordia College, B.A.; Syracuse University, M.A.;
University of North Texas, Ph.D.

Dolance, John ....................................................... Spanish
Colorado State University, B.A.; University of Colorado, M.A.

Donham, Brent ...................................................... Engineering Technology
New Mexico State Univ., B.S.; Stanford Univ., M.S.

Dreden, Irene J. ....................................................... Spanish/English as a Second/Foreign Language
University of Singapore, B.A.; James Cook University of North
Queensland, Australia, M.Ed.; State University of New York at
Buffalo, Ph.D.

Eggleston, Kathryn K. ............................................... Vice President, Economic Development
Manzano State University, B.S.; Texas Woman's University, M.S.N.;
University of Texas at Dallas, Ph.D.

Elder, Janet R. ....................................................... Developmental Reading
University of Texas, Austin, B.A.; Southern Methodist University, M.A.

Esparza, Ralph ...................................................... Mathematics
Midwestern University, B.S.; Oklahoma State University, M.S.

Ezell, Vally E. ......................................................... History
Southern Methodist University, B.A., M.L.A.

Flowers, Janet ...................................................... Psychology
University of Southern California, B.A., M.A., Ph.D.

Garcia, Ricardo ...................................................... English
University of Texas, Austin, B.A.; Southern Methodist University, M.A.

Gilbons, Mary Frances ............................................. English
Sam Houston State University, B.A., M.A.
Gilles, Lola.................................Teaching Admin., Multimedia
Boston Univ., B.S.; Univ. of Texas, Dallas, M.A.

Gloyd, Jane R..................................Ornamental Horticulture
Richland College, A.A.A.S.; Kansas State University, B.S.;
East Texas State University, M.S.

Gooch, Stephen E..................................History
Baylor University, B.A., M.A.

Good, Peggy....................................Office Technology
Computer Science/Computer Information Systems
University of Oklahoma, B.S.; Southern Methodist University, M.A.S.

Gordon, Cindy..................................Asst. Dean, Cont. Ed.
University of Texas at Arlington, B.A.; University of Texas, M.Ed.

Gussis, Jerri D..................................Government
Northwestern State College, B.A.; Oklahoma State University, M.S.

Harootunian, Mehrdad..........................Executive Dean, Corporate Services
National University of Iran, B.A.; Michigan State University, M.A.

Harrison, Bobble J..............................Director
Southwestern Christian College, A.S.; Texas Tech University, B.S.;
East Texas State University, M.S.

Harwood, Deborah A..........................Special Asst. to V.P. Economic Dev.

Harwood, John..................................Counselor
University of North Texas, B.S., M.Ed.

Hayes, Wes.....................................Director, Facilities Services
Texas A&M Institute, B.S., M.A.

Henderson, Thomas P...........................Real Estate
University of Illinois, B.S.; Illinois State University, M.S.

Henry, Matthew.................................English
Brooklyn College, B.S.; SUNY College at Brockport, M.A.

Hernandez, Celeste..............................Mathematics
Trinity University, B.A.; University of Wisconsin, M.A.;
University of North Texas, Ph.D.

Herring, Maris..................................Counselor
Waxahachie Junior College, B.A.; Arkansas State University, M.R.C.

Hester, Gwendolyn L............................Office Technology
Michigan State University, M.A.; Wayne State University, B.S., Ed.D.

Hickman, M. T..................................Travel & Tourism
University of S. Mississippi, B.S.; University of North Texas, M.S.

High-Hardin, Danette...........................Assistant Dean, Info. Services
Southern Methodist University, B.A., M.A.;
University of Arizona, M.Ed.

Hughes, Robert.................................Business
Central College, A.A.; Southern Nazarene University, B.A.A.;
University of North Texas, M.B.E., Ed.D.

Irwin, Jim.....................................Music
University of Iowa, B.M., D.M.A.; Indiana University, M.M.

Irwin, Peter..................................Computer Information Systems
Southern Methodist University, B.B.A., M.B.A.;
University of North Texas, Ed.D.

Jackson, Sally.................................Developmental Math
University of Texas at El Paso, B.S., M.Ed., M.A.T.

James, Janet..................................Special Assistant to the President
University of Texas, Austin, B.A.; Southern Methodist University, M.L.A.

Jenkins, La Queta.................................Sociology
University of Oklahoma, B.S.; University of Arkansas, M.A.

Jesch-Skaggs, Sharlee..........................Library Faculty/Reference Librarian
Southwest Texas State Univ., B.A.; University of Texas, Austin, M.L.S.

John, Gary G..................................Counselor
Tarrant County College, B.A., M.A.; East Texas State University, Ed.D.

Johnson, Carol M.................................Director, Library Sciences
West Texas State University, B.S.; University of North Texas, M.L.S.

Jolner, Pat.....................................International Business
University of North Texas, B.B.A., M.B.A.;
Southern Methodist University, M.L.A.

Jones, Becky..................................Office Tech. Program Coord.
University of Nebraska, B.S., M.Ed.

Jones, Sue..................................Psychology/Physical Education
Nebraska Wesleyan Univ., B.A.; Southern Methodist Univ., M.A.;
Texas Woman's University, Ph.D.

Keiser, Mark.................................English
Stephen F. Austin State University, B.A., M.A.

Kesterson, R. Brent............................Dean, Technical Education
Oklahoma Baptist Univ., B.A.; Southern Seminary, M.R.E.

Kosarek, Debra..................................Dean, Institutional Effectiveness
Texas Woman's University, B.S., B.M.A.

Lam, Julia..................................Sociology/Research Associate
University of Texas, Arlington, B.A., M.A.

Lambert, James W.................................Med. C@nul? Stg. Audio Video
Northwestern State College, B.S.; Indiana State University, M.S.

Levis, Marjorie H...............................Journalism/Developmental Writing
Arizona State University, B.S.; University of Texas at Arlington, M.A.

Lester, Carole..................................Associate Dean, Academic Enrichment
Richland College, A.A., University of Texas at Dallas, B.A., M.A.;
University of North Texas, Ph.D.

Little-Noelte, Peggy............................German
Indiana University, B.A., M.A.T.

Lopez, Oscar.................................Director, Disability Services/Adult Resource Center
Cisco Junior College, A.A.; University of Texas, Austin, B.A.;
Our Lady of the Lake University, M.A.

Lott, Kenneth.................................Mathematics
University of Texas, Austin, B.A.; University of North Texas, M.S.

Loucas, Wayne.................................Photography
Miami-Dade Community College, A.A.; Florida International University, B.S.;
University of South Florida, M.F.A.

Luter, Edward C.................................English
University of Dallas, B.A.; University of Miami, M.A.

Mandernach, Charles G........................English
University of Northern Iowa, B.A.; Eastern School of Music, M.M.

Marrone, Michael M............................English
University of Texas, Austin, B.A.; Universidad de Puerto Rico, M.A.

Martinez, Fred..................................Counselor
University of Dallas, B.A., M.Div.

Massingale, George W........................Division Dean, Humanities
Northeast Louisiana University, B.A., M.M.E.;
University of North Texas, Ph.D.

Matlock, Jerry L...............................Developmental Mathematics
University of Texas, Austin, B.A.; East Texas State University, M.S.

Matter, William W.............................English
Johnson Tech University, B.A., M.A., Ph.D.

May, Gwen.................................Computer Science/Computer Information Systems
Oklahoma State University, B.S.; University of Texas, D.A.T.

McCleveen, Jerry D............................English
Southeastern Louisiana University, B.A.; Louisiana State University, M.A.

McKay, Jerald M.................................Engineering Technology
East Texas State University, B.S.

McLaughlin, Thomas A........................Dean of Student Support Services
Coalinga College, A.A.; Wisconsin State University, B.S.;
Southern Illinois University, M.S.

McQueen, Steven B..............................Physical Education
Richland College, A.A.; Univ. of North Texas, B.S.;
East Texas State Univ., M.S., Ed.D.

Miles, John Mike..............................Physical Education
Southern Illinois University, B.S.; New Mexico State University, M.A.

Miller, John T.................................Dean, Educational & Admin. Technology
Abilene Christian University, B.S.

Miller, Susan J..................................Mathematics
Austin College, B.A.; Southern Methodist University, M.S.

Missalka, Franklin...............................Horticulture
Muskogee Junior College, B.A., A.A.; Oklahoma State University, B.S., M.S.

Mims, Robert L. Jr............................Geology
University of Texas at El Paso, B.S., M.S.; Texas A&M Commerce, M.S., Ed.D.

Mittelsief, Joseph...............................President
McMurry College, B.S.; University of Texas, Austin, Ph.D.

Morable, Linda R...............................Management
Texas Woman's University, B.S., M.B.A.; Florida State University, Ph.D.

Mosley, Joe..................................Developmental Writing
University of Oklahoma, B.F.A.; University of Dallas, M.A.

Motley, Tom D.................................Business
University of Texas, Arlington, B.A.; University of Dallas, M.A., M.F.A.

Murchison, Royce H............................English
Texas A&M University, B.A.; Southern Methodist University, M.L.A.;
University of Texas at Arlington, Ph.D.

Muyssens-Poellot, Louis Anne....................Humanities/Art
Dalda Wesleyan University, B.A.; University of North Texas, M.Ed.;
East Texas State University, Ph.D.

Neal, William B...............................Physical Education
Hiram College, B.A.; Southern Methodist University, M.S.

Newbury, Fred.................................Economics
Howard Payne University, B.A.; University of North Texas, M.Ed., Ed.D.

Northcut, Mary M...............................English
University of Texas, Arlington, B.A.; Southern Methodist University, M.A.;
Texas Christian University, Ph.D.

Nunley, John Parker............................Anthropology
University of Texas, Austin, B.A., M.A.;
Southern Methodist University, M.A., Ph.D.

O'Connor, Linda ..................................Biology
University of Texas, Austin, B.A.; Southern Methodist University, M.A.

Ohlhausen, Orlan D..............................Mathematics
Abilene Christian University, B.A., M.A.

Osenbenzki, Mary..............................Speech
Univ. of Nebraska, Kearney, B.A.; University of North Texas, M.S., Ph.D.

Paez, Lee..................................English as a Second Language
University of the Americas, B.A.;
West University College of Graduate Studies, M.A.;
University of Houston, Ph.D.

Pascal, Nanette.................................Spanish/Director, Special Projects
Texas Woman's Univ., M.A.; Villanova University, Havana, Cuba, Ph.D.;
East Texas State University, Ph.D.
Penner, Gary .................................................Mathematics
Nebraska State Teacher's College, B.S.; University of Illinois, M.A.

Peres-Ramos, Sara ..................................Biology/Chemistry
University of Puerto Rico, B.S.; Texas A&M University, M.S., Ph.D.

Perkins, Dan G.................................................Psychology
Canton Community College, A.A.; Bradley University, B.S., M.A.;
University of North Texas, Ph.D.

Peterson, Jane E.................................................English
Bethel College, B.A.; University of Arkansas, M.A., Ph.D.

Pilcher, Rose Marie .....................................Accounting
Tyler Junior College, A.S.; University of North Texas, B.B.A., M.B.A.

Polk, Larry..................................................Counselor
Texas A&M-Commerce, B.A., M.S.

Poublan, Maurice .............................................French
University of Manitoba, M.A.; Sorbonne Nouvelle, M.A.

Price, Jack Randall .................................................Psychology
University of North Texas, B.S., M.S., Ph.D.

Rager, Ernest F.............................................Humanities
University of North Texas, B.S.; University of Illinois, M.S.

Remington, Jeana.......................................Teaching Admin/ACFI
Colorado Christian University, B.A.; Amber University, M.A.

Rentsch, Jackie S..........................................Biology
Texas A&M, B.S.; University of Hawaii, M.S.

Ricks, Gay S..................................................Counselor
East Texas State University, B.S., M.S.

Ritter, John T.............................................Physics
University of Tulsa, B.S.; Illinois Institute of Technology, Ph.D.

Rojas, Maria...................................................Spanish
Universidad de Madrid, B.A.; University of Texas, Arlington, M.A.

Rosa, Michael.............................................Division Dean, Business & Professions
East Texas State University, B.S., M.S.

Ruiz-Esparza, Deborah A.................................Theatre
University of North Texas, B.S.; University of Texas, M.F.A.

Schroeder, Al.......................................Computer Information Systems
Southwest Texas State University, B.S.;
Western Michigan University, M.A.; East Texas State University, M.B.A.

Sconce, Evelyn..............................................Management
George Mason College, University of Virginia, B.A.;
University of Missouri, M.A.; East Texas State University, Ph.D.

Sheffield, Charles..........................................Theater Design
University of Texas, Austin, B.F.A., M.F.A.

Shepard, Scott M..............................................English
University of Maine, B.A.; M.A.; Bowling Green University, Ph.D.

Showman, Sam...........................................Assistant to Dean of Financial Services
Richland College, A.A.

Shorow, Samuel..........................................Economics
Casper College, A.B.S.; Texas Christian University, B.B.A., M.B.A.

Schoenecker, William G.................................Engineering Technology/Humanities
Olympic College, A.A.; Oregon State University, B.S., M.A.

Somero, Deborah..................................Special Asst. to VP, Recruiting & High School Relations
Richland College, A.A.S.; University of Texas, Dallas, B.A.

Spence, Patricia R......................................English/Speech/Film
Queens College, N.Y., B.A.; University of Wisconsin, M.A.

Stanco, Joe...............................................Teaching Adm., Honors
University of Dallas, B.A.; University of Texas at Austin, M.A.

Stansel, John D.............................................Physical Education
University of North Texas, Ph.B.; Texas Tech University, M.S.

Stone, Louis R............................................Physical Education
Abilene Christian University, B.S.E., M.E.

Story, Chester W........................................Athletics/Physical Education
Austin College, B.S.; Univ. of North Texas, M.Ed.

Stover, James W........................................Art
Baylor University, B.F.A.; Columbia University, M.A.;
Texas Woman's University, M.F.A.

Summers, Tony E......................................Vice President for Student Development
Community College of Allegheny County, A.S.;
Duquesne University, B.A.; University of Pittsburgh, M.Ed.

Sweedlund, Trudi J.....................................English/Human Development
University of Houston, B.A., Southern Methodist University, M.A.;
University of North Texas, M.Ed.

Taulbee, Thomas L......................................Psychology/Sociology
Illinois State University, B.S.; Texas A&M-Commerce, M.S., Ed.D.

Taylor, Outida.....................................Choral Director
University of Alabama, B.S., M.A.; University of North Texas, Ph.D.

Thompson, Donald E........................................Counselor
State University of New York, Buffalo, B.A.;
University of North Texas, M.Ed., Ph.D.

Tian, Jimin..................................................Humanities
Manhattan College, B.S.; Washington State University, M.F.A., Ph.D.

Tinnin, Joe..................................................Psychology
Southern Methodist University, B.A.; Texas Christian University, M.A.

Tinsley, Sam.............................................Developmental Math
Ouachita Baptist University, B.S.; University of Mississippi, M.S., Ph.D.

Trickel, John A.............................................American History
University of Texas, B.A., M.A.; University of North Texas, Ed.D.

Truong, Ngoc...............................................Assistant to Dean of Tech. Ed.
University of Arkansas, B.A.; M.Ed.

Vera, Fonda...............................................Assistant Dean, Research & Planning
Univ. of Texas at Arlington, B.A., M.A.

Verrett, Gary D......................................History/Psychology
Abilene Christian Univ., B.S., M.Ed.; University of North Texas, Ph.D.

Vines, Martha...........................................Assistant Dean, Center for Independent Study
East Texas State University, B.A.; Amber University, M.S.

Walker, Donna..........................................Dean of Admissions & Registration
Texas Tech Univ., B.S., M.A.

Wallace, Jerry D...........................................Music
Texas Christian University, B.M., M.A.; University of North Texas, Ph.D.

Warwick, Noreen M..................................Political Science
Southern Methodist University, B.A., M.A.

Waterman, Randy T.....................................Business
University of North Texas, B.S., M.B.A.

Weaver, Melinda........................................Associate Dean, Skills Training Center
Wooster College, B.A.Ed.; Butler University, M.S.Ed.

Wharton, Joseph..................................Athletics/Physical Ed.
Baylor University, B.B.A.; Texas A&M-Commerce, M.S.

Williams, Joselle..................................Computer Information Systems
University of Texas, Austin, B.A.; Amber University, M.B.A.

Williams, Joyce..........................................Dean, Continuing Education
Mississippi Valley College, B.S.; Delta State University, M.Ed.

Williams, Rebeca..................................Chemistry
Louisiana State University, B.S.; Southern Methodist University, M.S.

Wood, Hugh G......................................Western Civilization/U.S. History
Western State College, B.A.; University of Colorado, M.A., Ph.D.

Yates, Kathryn..........................................Government/Studies Abroad
Midwestern State University, B.A., M.A.

Young, Gordon D........................................Art
University of Nebraska, B.F.A.; Tulane University, M.F.A.

Zimmermann, Patricia..................................Computer Science
University of Texas, Austin, B.A., M.A.
ASSOCIATE IN ARTS/ASSOCIATE IN SCIENCES DEGREES

In order to be eligible to receive an Associate in Arts/Associate in Sciences Degree, a student must:

(1) Complete a minimum of 61 credit hours as shown below;
(2) Earn a grade of at least a “C” in English 1301, Speech 1311, and the selected college math course;
(3) Receive a GPA (2) of at least 2.00 (“C”); and
(4) Meet all TASP requirements.

Students completing the requirements may select to receive the Associate in Arts or Associate in Sciences degree title.

Students who plan to transfer must work closely with an advisor.

<table>
<thead>
<tr>
<th>CREDIT HOURS TO BE COMPLETED</th>
<th>CREDIT HOURS TO BE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION</td>
<td>9</td>
</tr>
<tr>
<td>Select each of the following:</td>
<td></td>
</tr>
<tr>
<td>English 1301</td>
<td></td>
</tr>
<tr>
<td>(A grade of “C” or better must be earned)</td>
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<tr>
<td>English 1302</td>
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</tr>
<tr>
<td>Speech 1311</td>
<td></td>
</tr>
<tr>
<td>(A grade of “C” or better must be earned)</td>
<td></td>
</tr>
<tr>
<td>MATHEMATICS</td>
<td>3</td>
</tr>
<tr>
<td>(A grade of “C” or better must be earned)</td>
<td></td>
</tr>
<tr>
<td>Select one course:</td>
<td></td>
</tr>
<tr>
<td>Math 1314</td>
<td></td>
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<tr>
<td>Math 1324</td>
<td></td>
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<tr>
<td>Math 1332</td>
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<td>Math 1333</td>
<td></td>
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<td>Math 1342</td>
<td></td>
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<tr>
<td>Math 1348</td>
<td></td>
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<tr>
<td>Math 1414</td>
<td></td>
</tr>
<tr>
<td>Math 2412</td>
<td></td>
</tr>
<tr>
<td>Or higher level</td>
<td></td>
</tr>
<tr>
<td>LAB SCIENCES</td>
<td>8</td>
</tr>
<tr>
<td>Select two courses:</td>
<td></td>
</tr>
<tr>
<td>Biology 1406, 1407, 1408, 1409</td>
<td></td>
</tr>
<tr>
<td>Chemistry 1405, 1407, 1411, 1412</td>
<td></td>
</tr>
<tr>
<td>Geology 1401, 1403, 1404, 1445</td>
<td></td>
</tr>
<tr>
<td>Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: This requirement cannot be met by using the following combinations: B1OL 1406 & 1406; CHEM 1405 & 1411; PHYS 1401 & 1405; PHYS 1401 & 2425; PHYS 1405 & 2425.

| SOCIAL/BEHAVIORAL SCIENCES | 15                             |
| Select one course from the following: |                               |
| Anthropology 2346, 2351; Economics 1303, 2301, 2302, 2311; Psychology 2301, 2314, 2316; Sociology 1301, 1306, 2319 |

| HUMANITIES/VISUAL AND PERFORMING ARTS | 9                              |
| Select one course from each of the three groupings: |                               |
| I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 | |
| II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 | |
| III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304 | |

| INSTITUTIONAL OPTIONS | 4                             |
| Physical Education 1184 |                               |
| Computer Science 1300 or higher level COSC course | |

| ELECTIVE CREDITS | 13                             |
| These courses may be selected from those designed for a major field of study. | |

TOTAL CREDIT HOURS 61
ASSOCIATE IN SCIENCES DEGREE IN BUSINESS

This degree plan is designed to meet the needs of students who plan to major in business but are unsure of where they wish to transfer. This is a general plan and may/may not satisfy the requirements of a specific transfer university. Students should work closely with an advisor.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including the courses listed below;
2. Earn a grade of "C" or better in English 1301, Speech 1311, and Math 1324;
3. Receive a GPA (2) of at least 2.00 ("C"); and
4. Meet all TASP requirements.

<table>
<thead>
<tr>
<th>CREDIT HOURS TO BE COMPLETED</th>
<th>CREDIT HOURS TO BE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMMUNICATION</strong></td>
<td><strong>HUMANITIES/ VISUAL AND</strong></td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td><strong>Select each of the following:</strong></td>
<td><strong>PERFORMING ARTS</strong></td>
</tr>
<tr>
<td>English 1301</td>
<td>Select one course from each of the</td>
</tr>
<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
<td>three groupings:</td>
</tr>
<tr>
<td>English 1302</td>
<td>I. Arts 1301, 1303, 1304; Dance 2303;</td>
</tr>
<tr>
<td>Speech 1311</td>
<td>Drama 1310, 2366; Humanities 1301;</td>
</tr>
<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
<td>Music 1306, 1308, 1309</td>
</tr>
<tr>
<td><strong>MATHEMATICS</strong></td>
<td>II. English 2321, 2322, 2323, 2326,</td>
</tr>
<tr>
<td>3</td>
<td>2327, 2328, 2331, 2332, 2333</td>
</tr>
<tr>
<td>Math 1324</td>
<td>III. Cultural Studies 2370; History 2321,</td>
</tr>
<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
<td>2322, 2380, 2381; Philosophy 1301,</td>
</tr>
<tr>
<td></td>
<td>2306, 2307, 2316, 2317; Religion 1304</td>
</tr>
<tr>
<td><strong>LAB SCIENCES</strong></td>
<td><strong>INSTITUTIONAL OPTIONS</strong></td>
</tr>
<tr>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td><strong>Select two courses:</strong></td>
<td><strong>Take both courses below:</strong></td>
</tr>
<tr>
<td>Biology 1406, 1407, 1408, 1409;</td>
<td>Physical Education 1164</td>
</tr>
<tr>
<td>Chemistry 1405, 1407, 1411, 1412;</td>
<td>Computer Science 1300 or higher</td>
</tr>
<tr>
<td>Geology 1401, 1403, 1404, 1445;</td>
<td>level COSC course</td>
</tr>
<tr>
<td>Physics 1401, 1402, 1405, 1407,</td>
<td><strong>REQUIRED BUSINESS COURSES</strong></td>
</tr>
<tr>
<td>1411, 1412, 1415, 1417, 2425, 2426</td>
<td>12</td>
</tr>
<tr>
<td>NOTE: This requirement cannot be met by using the following combinations: BIOL 1406 &amp; 1408; CHEM 1405 &amp; 1411; PHYS 1401 &amp; 1405; PHYS 1401 &amp; 2425; PHYS 1405 &amp; 2425.</td>
<td>Must take all courses below:</td>
</tr>
<tr>
<td></td>
<td>Accounting 2301 AND 2302</td>
</tr>
<tr>
<td></td>
<td>Economics 2302</td>
</tr>
<tr>
<td></td>
<td>Math 1325</td>
</tr>
<tr>
<td><strong>SOCIAL/BEHAVIORAL SCIENCES</strong></td>
<td><strong>ELECTIVE CREDIT</strong></td>
</tr>
<tr>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td><strong>Take all courses below:</strong></td>
<td><strong>TOTAL CREDIT HOURS</strong></td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>61</td>
</tr>
<tr>
<td>Government 2301, 2302</td>
<td></td>
</tr>
<tr>
<td>Economics 2301</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Students who complete this plan are awarded the Associate in Sciences Degree.
ASSOCIATE IN ARTS/ASSOCIATE IN SCIENCES DEGREES THROUGH DISTANCE LEARNING COURSES

In order to be eligible to receive an Associate in Arts or Associate in Arts degree, a student must:

1. Complete a minimum of 61 credit hours including the courses listed below;
2. Earn a grade of "C" or better in English 1301, Speech 1311, and Math 1314;
3. Receive a GPA (2) of at least 2.00 ("C"); and
4. Meet all TASP requirements.

- Students who plan to transfer to a four-year institution should consult an advisor of that institution to ensure that selected courses will both transfer and apply toward the intended major.
- Veterans and Financial Aid recipients should consult an advisor before enrolling in distance learning.
- Students completing the requirements may select to receive the Associate in Arts or Associate in Sciences degree title.

DCCCD
Distance Learning Course Options
Associate in Arts/Associate in Sciences

This chart shows how one can earn the entire A.A. or A.S. degree in its entirety with distance learning courses. However, one can also earn a degree with a combination of distance learning courses and on-campus courses. Talk to an advisor about the best options.

<table>
<thead>
<tr>
<th>CREDIT HOURS TO BE COMPLETED</th>
<th>CREDIT HOURS TO BE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMMUNICATION</strong></td>
<td><strong>HUMANITIES/VISUAL &amp; PERFORMING ARTS</strong></td>
</tr>
<tr>
<td>English 1301</td>
<td>9</td>
</tr>
<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
<td></td>
</tr>
<tr>
<td>English 1302</td>
<td></td>
</tr>
<tr>
<td>Speech 1311</td>
<td></td>
</tr>
<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
<td></td>
</tr>
<tr>
<td><strong>MATHEMATICS</strong></td>
<td>3</td>
</tr>
<tr>
<td>Math 1314</td>
<td></td>
</tr>
<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
<td></td>
</tr>
<tr>
<td><strong>LAB SCIENCES</strong></td>
<td>8</td>
</tr>
<tr>
<td>Select two courses:</td>
<td></td>
</tr>
<tr>
<td>Biology 1408</td>
<td></td>
</tr>
<tr>
<td>Biology 1409</td>
<td></td>
</tr>
<tr>
<td>Physics (Astronomy) 1411</td>
<td></td>
</tr>
<tr>
<td>Physics (Astronomy) 1412</td>
<td></td>
</tr>
<tr>
<td><strong>SOCIAL/BEHAVIORAL SCIENCES</strong></td>
<td>12</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td></td>
</tr>
<tr>
<td>Government 2301, 2302</td>
<td></td>
</tr>
<tr>
<td>Select one course from the following:</td>
<td></td>
</tr>
<tr>
<td>Anthropology 2351</td>
<td></td>
</tr>
<tr>
<td>Economics 2301, 2302</td>
<td></td>
</tr>
<tr>
<td>Psychology 2301, 2314</td>
<td></td>
</tr>
<tr>
<td>Sociology 1301</td>
<td></td>
</tr>
<tr>
<td><strong>INSTITUTIONAL OPTIONS</strong></td>
<td>4</td>
</tr>
<tr>
<td>Physical Education 1164</td>
<td></td>
</tr>
<tr>
<td>Computer Science 1401 or higher level COSC course</td>
<td></td>
</tr>
<tr>
<td><strong>ELECTIVE CREDITS</strong></td>
<td>13</td>
</tr>
<tr>
<td>These courses may be selected from those designed for a major field of study.</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CREDIT HOURS</strong></td>
<td>61</td>
</tr>
</tbody>
</table>

79
ASSOCIATE IN ARTS DEGREE IN PHOTOGRAPHIC/IMAGING
Available at Richland College

This degree plan is designed to meet the needs of students who plan to major in Photographic/Imaging but are unsure of where they wish to transfer. This is a general plan and may/may not satisfy the requirements of a specific transfer university. Students should work closely with an advisor.

In order to be eligible to receive this degree, a student must:
1. Complete a minimum of 61 credit hours including all the required courses in the core and the courses listed under Photographic/Imaging;
2. Earn a grade of "C" or better in English 1301, Speech 1311, and the selected college-level Mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C"); and
4. Meet all TASP requirements.

| COMMUNICATION | 9
|---------------|---
| Select each of the following: |   |
| English 1301 | (A grade of "C" or better must be earned) |
| English 1302 |   |
| Speech 1311 | (A grade of "C" or better must be earned) |

| MATHEMATICS | 3
|-------------|---
| (A grade of "C" or better must be earned) |
| Select one course: |   |
| Math 1314; Math 1324; Math 1332; |   |
| Math 1333; Math 1342; Math 1348; |   |
| Math 1414; Math 2412; Or higher level |

| LAB SCIENCES | 8
|--------------|---
| Select two courses: |   |
| Biology 1406, 1407, 1408, 1409; |   |
| Chemistry 1405, 1407, 1411, 1412; |   |
| Geology 1401, 1403, 1404, 1445; |   |
| Physics 1401, 1402, 1405, 1407, 1411, 1412, 1415, 1417, 2425, 2426 |

NOTE: This requirement cannot be met by using the following combinations: BIOL 1406 & 1408; CHEM 1405 & 1411; PHYS 1401 & 1405; PHYS 1401 & 2425; PHYS 1405 & 2425.

| SOCIAL/BEHAVIORAL SCIENCES | 15
|-----------------------------|---
| History 1301, 1302 |   |
| Government 2301, 2302 |   |
| Select one course from the following: |   |
| Anthropology 2346, 2351; |   |
| Economics 1303, 2301, 2302, 2311; |   |
| Psychology 2301, 2314, 2316; |   |
| Sociology 1301, 1306, 2319 |

| HUMANITIES/VISUAL AND PERFORMING ARTS | 9
|--------------------------------------|---
| Select one course from each of the three groupings: |   |
| I. Arts 1301, 1303, 1304; Dance 2303; Drama 1310, 2366; Humanities 1301; Music 1306, 1308, 1309 |
| II. English 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333 |
| III. Cultural Studies 2370; History 2321, 2322, 2380, 2381; Philosophy 1301, 2306, 2307, 2316, 2317; Religion 1304 |

| INSTITUTIONAL OPTIONS | 4
|----------------------|---
| Physical Education 1164 and Computer Science 1300 or higher level COSC course |

| PHOTOGRAPHIC/IMAGING | 13
|----------------------|---
| Select among the following: degree is awarded at 61 hours although students are encouraged to take ALL courses below: |   |
| Introduction to Photography (PHOT 1316 or ARTS 2356) |   |
| Advanced Photography (PHOT 1317 or ARTS 2357) |   |
| Introduction to Digital Imaging (PHOT 2325) |   |
| Advanced Digital Imaging (PHOT 2326) |   |
| Commercial Photography (PHOT 2356) |   |
| Special Photographic Topics and Problems (PHOT 2375) |

TOTAL CREDIT HOURS 61

NOTE: Students who complete this plan are awarded the Associate in Arts Degree
ASSOCIATE IN ARTS DEGREE IN URBAN EDUCATION
Available at EI Centro and Richland Colleges

This degree plan is designed to meet the needs of students who plan to major in Urban Education and pursue a teaching career. This plan will transfer directly into the Early childhood/Elementary Certification (PreK-6) and the Bilingual Education programs at UT-Arlington. Students should work closely with an advisor if they plan to transfer into teacher certification programs at other universities.

In order to be eligible to receive this degree, a student must:

1. Complete a minimum of 61 credit hours including all the required courses in the core and the courses listed under "Required Other Courses";
2. Earn a grade of "C" or better in English 1301, Speech 1311, and the selected college-level Mathematics course;
3. Receive a GPA (2) of at least 2.00 ("C"); and
4. Meet all TASP requirements.

<table>
<thead>
<tr>
<th>CREDIT HOURS TO BE COMPLETED</th>
<th>CREDIT HOURS TO BE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNICATION</td>
<td>9</td>
</tr>
<tr>
<td>Select each of the following:</td>
<td></td>
</tr>
<tr>
<td>English 1301</td>
<td></td>
</tr>
<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
<td></td>
</tr>
<tr>
<td>English 1302</td>
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<tr>
<td>Speech 1311</td>
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<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
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<tr>
<td>MATHEMATICS</td>
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<tr>
<td>(A grade of &quot;C&quot; or better must be earned)</td>
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<tr>
<td>Select one course:</td>
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<tr>
<td>Math 1314 or 1414</td>
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<tr>
<td>LAB SCIENCES</td>
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<tr>
<td>Select two courses:</td>
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<tr>
<td>Biology 1406, 1407, 1408, 1409;</td>
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<tr>
<td>Chemistry 1405, 1407, 1411, 1412;</td>
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<tr>
<td>Geology 1401, 1403, 1404, 1445;</td>
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<tr>
<td>Physics 1401, 1402, 1405, 1407,</td>
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<tr>
<td>1411, 1412, 1415, 1417, 2425, 2426</td>
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<tr>
<td>NOTE: This requirement cannot be met by using the following combinations: BioL 1406 &amp; 1408; CHEM 1405 &amp; 1411; PHYs 1401 &amp; 1405; PHYs 1401 &amp; 2425.</td>
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<tr>
<td>SOCIAL/BEHAVIORAL SCIENCES</td>
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<td>History 1301, 1302</td>
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<td>Government 2301, 2302</td>
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<tr>
<td>Psychology 2301</td>
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HUMANITIES/VISUAL AND PERFORMING ARTS

Select one course from each of the three groupings:
1. Arts 1301 or Music 1306
2. English 2326, 2327, 2328, 2331, 2332, or 2333
3. EDTC 1325 (which will be substituted for CUST 2370)

INSTITUTIONAL OPTIONS

Physical Education 1164 and Computer Science 1300 or higher level COSC course

OTHER REQUIRED COURSES

Students should take all the following:
- EDTC 1301
- CDEC 1359
- EDTC 1307 or 1321
- Spanish 1411

While the degree will be awarded upon the completion of 61 hours, students are strongly encouraged to complete Spanish 1412 also.

TOTAL CREDIT HOURS 61

NOTE: Students who complete this plan are awarded the Associate in Arts Degree.
ASSOCIATE IN ARTS, ASSOCIATE IN SCIENCES
OR ASSOCIATE IN BUSINESS
FAST TRACK DEGREE OPTION
(Available only at Richland College)

This degree plan is designed to meet the needs of students who want to complete the Associate Degree in twelve months. Core courses and electives for the Fast Track Associate Degree may be taken in a variety of formats including regular-length semester classes, telecourses, May term classes, winter term classes, summer term classes or other flexible schedule options. Courses and electives designed specifically for the Fast Track Associate Degree begin every four, six or eight weeks to allow students maximum flexibility in their schedules. The Fast Track Associate Degree may be completed using a day, evening, or combined schedule of classes.

In order to receive an Associate Degree, a student must:
(1) Complete a minimum of 6 credit hours (see curriculum pattern for required courses);
(2) Receive a grade of "C" or better in core courses;
(3) Have a passing score on all sections of TASP (for students entering DCCCD Fall, 1989, or thereafter).

Students planning to transfer to a four year institution must consult the catalog of that institution to ensure selected courses will both transfer and apply toward the intended major. Material about transfer information is available in the Advising Center.

<table>
<thead>
<tr>
<th>DAYTIME SCHEDULE</th>
<th>EVENING SCHEDULE</th>
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<tbody>
<tr>
<td><strong>FALL 1</strong></td>
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<td>8:30-11:30</td>
<td>FALL 1</td>
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<tr>
<td>12:30-3:30</td>
<td>5:20-6:40 p.m.</td>
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<td>DMAT (if needed)</td>
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<td>or ECON 2301***</td>
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<td>6:45-9:45 p.m.</td>
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<td>HDEV 1372**</td>
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<td><strong>FALL 2</strong></td>
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<td><strong>FALL 3</strong></td>
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<td>8:30-11:30</td>
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<td><strong>WINTERTERM</strong></td>
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<td><strong>MAYTERM</strong></td>
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<td>9:00-2:30</td>
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</table>

(Continued on next page)

KEY:
* = required for the AAS Degree via Fast Track. Other course options outside the Fast Track format exist
** = elective course (may be replaced by other course options)
*** = students desiring to complete the AAS Business Degree program should enroll in these options
## ASSOCIATE IN ARTS, ASSOCIATE IN SCIENCES OR ASSOCIATE IN BUSINESS
**FAST TRACK DEGREE OPTION**
(Available only at Richland College)

### DAYTIME SCHEDULE (continued)

<table>
<thead>
<tr>
<th>MAYTERM</th>
<th>Morning</th>
<th>Afternoon</th>
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<tbody>
<tr>
<td>8:30-12:00</td>
<td>PHIL 2306* or MATH1325***</td>
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<tr>
<td>SUMMER 1</td>
<td>BUSI 1307*</td>
<td>ENGL 2311** or ACCT 2301***</td>
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<tr>
<td>SUMMER 2</td>
<td>PHED 1164 or ACCT 2302****</td>
<td>COSC 1401**</td>
<td>4</td>
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### EVENING SCHEDULE (continued)

| SUMMER 1              | 5:30-9:40                | PHYS 1415*               | 4                     |
| SUMMER 2              | 5:30-9:40                | PHYS 1417*               | 4                     |
| FALL 1                | 5:20-6:40                | DMAT (if needed) or MATH 1324***| 3                     |
|                       | 6:45-9:45                | GOVT 2301*               | 3                     |
| FALL 2                | 5:20-6:40                | DMAT or MATH (continued) |                       |
|                       | 6:45-9:45                | GOVT 2302**              |                       |
| FALL 3                | 5:20-6:40                | DMAT or MATH (continued) |                       |
|                       | 6:45-9:45                | ENGL 2328*               | 3                     |
| FALL 4                | 5:20-6:40                | DMAT or MATH (continued) |                       |
|                       | 6:45-9:45                | PHIL 2306*               | 3                     |
| SPRING 1              | 5:20-6:40                | DMAT (if needed) or MATH 1325***| 3                     |
|                       | 6:45-9:45                | BUSI 1307*               | 3                     |
| SPRING 2              | 5:20-6:40                | DMAT or MATH (continued) |                       |
|                       | 6:45-9:45                | ENGL 2311*               | 3                     |
| SPRING 3              | 5:20-6:40                | DMAT or MATH (continued) |                       |
|                       | 6:45-9:45                | COSC 1401**              | 3                     |
| SPRING 4              | 5:20-6:40                | DMAT or MATH (continued) |                       |
|                       | 6:45-9:45                | PSYC 2306**              | 3                     |
| MAYTERM               | 6:45-9:45                | PHED 1164*               | 1                     |
| SUMMER 1              | 5:30-9:40                | ACCT 2301***             | 3                     |
| SUMMER 2              | 5:30-9:40                | ACCT 2302***             | 3                     |

**TOTAL MINIMUM CREDITS =** 61

### KEY:
- * = required for the AAS Degree via Fast Track. Other course options outside the Fast Track format exist.
- ** = elective course (may be replaced by other course options)
- *** = students desiring to complete the AAS Business Degree program should enroll in these options

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83
<table>
<thead>
<tr>
<th>Career Educational Programs</th>
<th>BH</th>
<th>CV</th>
<th>EF</th>
<th>EC</th>
<th>MV</th>
<th>NL</th>
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<td>Accounting AAS</td>
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<td>Accounting Technician Enhanced Skills Certificate</td>
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<td>Accounting Clerk Certificate</td>
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<td>Air Conditioning &amp; Refrigeration - Residential AAS</td>
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<td>Residential Technician I Certificate</td>
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<td>Associate Degree Nursing AAS</td>
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<td>Auto Body Metal Technician Certificate</td>
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<td>Auto Body Shop Management Certificate</td>
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<td>Bakery/Pastry AAS</td>
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### Dallas County Community College District

**2000-2001 Technical/Occupational Programs Offered On Our Campuses**

**BH** - Brookhaven College  **CV** - Cedar Valley College  **EF** - Eastfield College  **EC** - El Centro College  
**MV** - Mountain View College  **NL** - North Lake College  **RL** - Richland College

#### Career Educational Programs

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<tbody>
<tr>
<td>Software Programmer/Developer AAS</td>
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</tbody>
</table>
ACCOUNTING

Offered at all seven campuses

( Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate )

Degree Plan Code: AAS.ACCT

This degree is designed to prepare students for various career opportunities in accounting. Students may specialize in the areas of financial, managerial, cost, tax, and/or small business accounting. Emphasis is placed on internal accounting procedures and generally accepted accounting principles. This program is intended to provide a foundation on which the graduate can build an accounting career through expanded experience and/or further education.

CREDIT HOURS

SEMESTER I

+ACCT 2301 Principles of Accounting I OR 3
+ACCT 2401 Principles of Accounting I 4
ACNT 1311 Introduction to Computerized Accounting 3
OFCT 1372 Office Calculating Machines 3
OFCT 1379 Word Processing I 3
Elective1 Business/Technical 3-4

15-17

SEMESTER II

ACCT 2302 Principles of Accounting II OR 3
ACCT 2402 Principles of Accounting II 4
ACNT 1313 Computerized Accounting Applications 3
ENGL 1301 Composition I 3
SPCH 1311 Introduction to Speech Communication 3
Elective1 Business/Technical 3-4

15-17

SEMESTER III

ECON 2301 Principles of Economics I 3
+++MATH 1324 Mathematics for Business and Economics I 3
Elective1 Business/Technical 3-4
Elective2 Accounting Specialty 3
Elective3 Social/Behavioral Science 3

15

SEMESTER IV

ECON 2302 Principles of Economics II 3
ENGL 1302 Composition II 3
Elective1 Business/Technical 3-4
Elective2 Accounting Specialty 3
Elective3 Humanities/Fine Arts 3

15-16

Minimum Hours Required 60-65

Upon completion of Semester I courses, the Accounting Clerk Certificate will be conferred.

Upon completion of Semester I and Semester II courses, the Accounting Assistant Certificate will be conferred.

Upon completion of Semester I through Semester IV courses, the Associate in Applied Sciences Degree in Accounting will be conferred.

+ACNT 1303 is recommended prior to ACCT 2301 or ACCT 2401 for a student with no accounting background. ACNT 1303 and ACNT 1304 are included in the Elective1 (Business/Technical) list in this program.

++Any student demonstrating proficiency by previous training, experience, or placement tests may substitute a course from the Elective1 (Business/Technical) list.

+++Any MATH course numbered 1300 or above may be substituted except students cannot take MATH 1371, MATH 1372, MATH 1373, MATH 1374, or MATH 1375 [These courses have been or will be revised effective, Fall 2000].

Elective1--The Business/Technical elective must be selected from the following fields/courses:

Accounting, Business, Computer Information Technology, ECON 1303, ENGL 2311, Management, Marketing, Mathematics, Office Technology. The practicum courses (ACNT 1366 and ACNT 2366) are recommended for students employed in a general business area. The cooperative education courses (ACNT 1380 and ACNT 2380) are recommended for students employed in the accounting area.

Elective2--The Accounting Specialty elective must be selected from the following accounting courses:

ACNT 1329 Payroll and Business Tax Accounting 3
ACNT 1331 Federal Income Tax: Individual 3
ACNT 1380 Cooperative Education-Accounting 3
ACNT 1391 Special Topics in Accounting 3
ACNT 2303 Intermediate Accounting I 3
ACNT 2304 Intermediate Accounting II 3
ACNT 2309 Cost Accounting 3
ACNT 2380 Cooperative Education-Accounting 3

Elective3--The Social/Behavioral Science elective must be selected from the following fields/courses:

Anthropology, ECON 1303, Geography (excluding GEOG 1301), Government, History, Human Development, Psychology, Sociology.

Elective4--The Humanities/Fine Arts elective must be selected from the following fields:

Art, Dance, Drama, Foreign Language, Humanities, Music, Philosophy, Religion, Sign Language

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Accounting and provides the student advanced skills required by the industry to specialize in Accounting Technician.

ACCOUNTING TECHNICIAN

Offered at all seven campuses

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.ACCT.TECH

<table>
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<tr>
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<tr>
<td>ACNT XXXX ................................................................. 3</td>
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<td>ACNT XXXX ................................................................. 3</td>
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Minimum Hours Required ................................................. 6

Select two courses not previously taken in the Associate in Applied Sciences Degree in Accounting from the following Accounting Specialty Courses:

ACNT 1329 Payroll and Business Tax
ACNT 1331 Federal Income Tax: Individual ................. 3
ACNT 1380 Cooperative Education-Accounting .......... 3
ACNT 1391 Special Topics in Accounting .................. 3
ACNT 2303 Intermediate Accounting I .................... 3
ACNT 2304 Intermediate Accounting II .................... 3
ACNT 2309 Cost Accounting ........................................ 3
ACNT 2380 Cooperative Education-Accounting .......... 3

This is a Tech Prep Program. Students interested in pursuing this Tech Prep Enhanced Skills Certificate should consult their advisor.
ACCOUNTING ASSISTANT

Offered at all seven campuses

Students pursuing this certificate program are waived from TASP requirements.

Degree Plan Code: CERT.ACCT.ASSIST

The program is designed to provide the student with an expanded knowledge of basic accounting and business principles while emphasizing the development of communication and human relations skills necessary for advancement in accounting or other business-related careers. The courses required for this certificate are applicable to the Associate in Applied Sciences Degree in Accounting.

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**SEMESTER I**

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<tr>
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<tbody>
<tr>
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<td>Principles of Accounting I OR</td>
<td>3</td>
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<tr>
<td>+ACCT 2401</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>+ACCT 1311</td>
<td>Introduction to Computerized</td>
<td>3</td>
</tr>
<tr>
<td>+OFCT 1372</td>
<td>Office Calculating Machines</td>
<td>3</td>
</tr>
<tr>
<td>+OFCT 1379</td>
<td>Word Processing I</td>
<td>3</td>
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**SEMESTER II**

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<tr>
<td>ACCT 2302</td>
<td>Principles of Accounting II OR</td>
<td>3</td>
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<tr>
<td>ACCT 2402</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>+ACCT 1313</td>
<td>Computerized Accounting</td>
<td>3</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech</td>
<td>3</td>
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<tr>
<td>Elective 1</td>
<td>Business/Technical</td>
<td>3-4</td>
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15-17

Minimum Hours Required: 30-34

+ACNT 1303 is recommended prior to ACCT 2301 or ACCT 2401 for a student with no accounting background. ACNT 1303 and ACNT 1304 are included in the Elective’ (Business/Technical) list of this program.

Any student demonstrating proficiency by previous training, experience, or placement tests may substitute a course from the Elective’ (Business/Technical) list.

Elective’—The Business/Technical elective must be selected from the following fields/courses:

Accounting, Business, Computer Information Technology, ECON 1303, ENGL 2311, Management, Marketing, Mathematics, Office Technology. The practicum courses (ACNT 1366 and ACNT 2366) are recommended for students employed in a general business area. The cooperative education courses (ACNT 1380 and ACNT 2380) are recommended for students employed in the accounting area.
ACCOUNTING CLERK

Offered at all seven campuses.

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ACCT.CLERK

This program is designed to provide the student with the skills necessary to obtain entry-level employment in accounting. Emphasis is on the development of basic accounting, spreadsheet, word processing, and ten-key skills. The courses required for the certificate are applicable to the Accounting Assistant Certificate and the Associate in Applied Sciences Degree in Accounting.

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<td>+ACCT 2401 Principles of Accounting I... (4)</td>
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<td>ACNT 1311 Introduction to Computerized Accounting... 3</td>
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Minimum Hours Required................................... 15-17

++ACNT 1303 is recommended prior to ACCT 2301 or ACCT 2401 for a student with no accounting background. ACNT 1303 and ACNT 1304 are included in the Elective’ (Business/Technical) list in this program.

++Any student demonstrating proficiency by previous training, experience, or placement tests may substitute a course from the Elective’ (Business/Technical) list.

Elective’–The Business/Technical elective must be selected from the following fields/courses:

Accounting, Business, Computer Information Technology, ECON 1303, ENGL 2311, Management, Marketing, Mathematics, Office Technology. The practicum courses (ACNT 1366 and ACNT 2366) are recommended for students employed in a general business area. The cooperative education courses (ACNT 1380 and ACNT 2380) are recommended for students employed in the accounting area.

90
## AIR CONDITIONING AND REFRIGERATION -- RESIDENTIAL

*Cedar Valley, Eastfield, and North Lake only*

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.HVAC.RESIDENT

This program is designed to train students to meet employment requirements in the field of residential air conditioning. This will include the installation, repair and maintenance of residential air conditioning equipment. Included in this program is the study of residential air conditioners, heat pumps, gas and electric furnaces, humidifiers, and the design of residential air conditioning systems. Throughout the entire program an emphasis is placed on current techniques used by service technicians.

### CREDIT HOURS

#### SEMESTER I

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<td>HART 1401</td>
<td>Electricity Principles</td>
<td>4</td>
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<tr>
<td>HART 1403A/C</td>
<td>Control Principles</td>
<td>4</td>
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<tr>
<td>HART 1407</td>
<td>Refrigeration Principles</td>
<td>4</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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#### SEMESTER II

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<td>HART 1441</td>
<td>Residential Air Conditioning</td>
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<td>HART 1445</td>
<td>Gas and Electric Heating</td>
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<td>HART 1449</td>
<td>Heat Pumps</td>
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<td>HART 2436</td>
<td>Troubleshooting OR</td>
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<td>HART 1380</td>
<td>Cooperative Education - Heating, Air Conditioning</td>
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<tr>
<td>HART 1386</td>
<td>Practicum (or field experience)-</td>
<td>(3)</td>
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<td>Heating, Air Conditioning and Refrigeration</td>
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<td>Technologies/Technician</td>
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<tr>
<td>HART 2438</td>
<td>Air Conditioning Installation/Service</td>
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<td>HART 2445</td>
<td>Air Conditioning Systems Design</td>
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#### SEMESTER IV

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<td>SPCH 1311</td>
<td>Introduction to Speech</td>
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<tr>
<td>++Elective</td>
<td>Humanities/Fine Arts</td>
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<td>+++Elective</td>
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<td>+++Elective</td>
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Minimum Hours Required: **60-61**

+ Elective − 3 credit hours:

+ Elective − 4 credit hours:

-MATH course (1300 level or above)

++ Elective − Humanities/Fine Arts − 3 credit hours:

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<td>DANC 2303</td>
<td>Dance Appreciation</td>
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<td>DRAM 1310</td>
<td>Introduction to the Theatre</td>
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<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities</td>
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<td>MUSI 1306</td>
<td>Music Appreciation</td>
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<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
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<td>Foreign Language/Interpreter Training Program</td>
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<td>Literature (Select from English 2322, 2332, 2333,</td>
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<td>0120, Human Development 0100, Human Development</td>
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<td>0110, Library Science 1370, Music 9175, Drama</td>
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</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Air Conditioning Refrigeration-Residential and provides the student advanced skills required by the industry to specialize in Profit Center Management.

PROFIT CENTER MANAGER

Cedar Valley, Eastfield, and North Lake only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.HVAC.P/C.MANAGER

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<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>HART 2436 Troubleshooting OR</td>
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<tr>
<td>HART 1380 Cooperative Education - Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
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<tr>
<td>HART 2380 Cooperative Education - Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
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<tr>
<td>HART 1368 Practicum (or field experience)- Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
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<td>HART 2368 Practicum (or field experience)- Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
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<tr>
<td>ACNT 1303 Introduction to Accounting I</td>
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<tr>
<td>BUSI 1301 Introduction to Business</td>
<td>3</td>
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<tr>
<td>CISC 1470 Introduction to Computer Concepts and Applications</td>
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Minimum Required Hours: 13-14

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.

AIR CONDITIONING AND REFRIGERATION – RESIDENTIAL TECHNICIAN I

Cedar Valley, Eastfield and North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.HVAC.RES.TECH.1

<table>
<thead>
<tr>
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<tr>
<td>HART 1401 Electricity Principles</td>
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<tr>
<td>HART 1403A/C Control Principles</td>
<td>4</td>
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<td>HART 1407 Refrigeration Principles</td>
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<th>SEMESTER II</th>
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<tr>
<td>HART 1441 Residential Air Conditioning</td>
<td>4</td>
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<tr>
<td>HART 1445 Gas and Electric Heating</td>
<td>4</td>
</tr>
<tr>
<td>HART 1449 Heat Pumps OR</td>
<td>4</td>
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<tr>
<td>HART 1380 Cooperative Education - Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
<td></td>
</tr>
<tr>
<td>HART 1368 Practicum (or field experience)- Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
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<tr>
<td>HART 1368 Practicum (or field experience)- Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
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Minimum Hours Required: 23-24
AIR CONDITIONING AND REFRIGERATION - RESIDENTIAL TECHNICIAN III

Cedar Valley, Eastfield and North Lake only

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.HVAC.TECH.III

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>Credit Hours</th>
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<tr>
<td>HART 1401 Electricity Principles</td>
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<td>HART 1403 A/C Control Principles</td>
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<td>Select two from the following:</td>
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<td>ENGL 1301 Composition I</td>
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<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
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<tr>
<td>+Elective Math Elective</td>
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<td>Minimum Hours Required</td>
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<tbody>
<tr>
<td>HART 1441 Residential Air Conditioning</td>
<td>4</td>
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<tr>
<td>HART 1445 Gas and Electric Heating</td>
<td>4</td>
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<tr>
<td>HART 1449 Heat Pumps OR</td>
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<td>HART 1380 Cooperative Education - Heating, Air Conditioning and Refrigeration Technologies/Technician OR</td>
<td>4</td>
</tr>
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<td>HART 1368 Practicum (or field experience) - Heating, Air Conditioning and Refrigeration Technologies/Technician</td>
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<td>(3) +-Elective</td>
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<td>Minimum Hours Required</td>
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HART 2436 Troubleshooting OR .......................................... 4
HART 1380 Cooperative Education - Heating, Air Conditioning and Refrigeration Technologies/Technician ............ 4
HART 2380 Cooperative Education - Heating, Air Conditioning and Refrigeration Technologies/Technician OR .............. 4
HART 1368 Practicum (or field experience) - Heating, Air Conditioning and Refrigeration Technologies/Technician .......... 3
HART 2368 Practicum (or field experience) - Heating, Air Conditioning and Refrigeration Technologies/Technician ......... 3
HART 2436 Air Conditioning Installation/Service .............. 4
HART 2445 Air Conditioning Systems Design .................... 4

11-12

Minimum Hours Required .................................................. 43-45

+Elective 3 credit hours chosen from MATH (1300 level or above courses)

++Elective Any credit course offered in the DCCCD will count toward graduation with the EXCEPTION of the following courses:
(Courses numbered 0099 and below, ART 1170, College Learning Skills 0100, Developmental Communications 0120, Human Development 0100, Human Development 0110, Library Science 1370, Music 9175, Drama 1170.)
AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

Eastfield only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.HVAC.AIR.COND

This program furnishes both the theory and practice required to qualify a person for employment in the various areas of the air conditioning and refrigeration industry. Special emphasis is placed on commercial and industrial air conditioning and refrigeration during the second year. Hands-on experience stresses operation and trouble-shooting of medium and low temperature refrigeration and chilled water air conditioning systems.

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<td>ENGL 1301 Composition I</td>
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<tbody>
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<td>HART 1441 Residential Air Conditioning</td>
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<tr>
<td>HART 1445 Gas and Electric Equipment</td>
<td>4</td>
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<tr>
<td>HART 1449 Heat Pumps</td>
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<tr>
<td>+Elective MATH Elective</td>
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<tr>
<td>HART 1442 Commercial Refrigeration</td>
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<td>HART 1507 Refrigeration Principles</td>
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<tr>
<td>HART 2434 Advanced A/C Controls</td>
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<tr>
<td>+Humanities/Fine Arts</td>
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Minimum Hours Required: 63

+MATH Elective must be selected from the following:

| MATH 1314  | College Algebra OR | 3          |
| MATH 1414  | College Algebra    | 4          |
| MATH 1332  | College Mathematics I | 3       |
| MATH 1342  | Introductory Statistics | 3     |

++Humanities/Fine Arts Elective must be selected from the following:

| ARTS 1301 | Art Appreciation | 3          |
| DRAM 1310 | Introduction to Theater | 3       |
| ENGL 2322 | British Literature | 3         |
| ENGL 2323 | British Literature | 3         |
| ENGL 2327 | American Literature | 3        |
| ENGL 2328 | American Literature | 3        |
| ENGL 2332 | World Literature | 3         |
| ENGL 2333 | World Literature | 3         |
| ENGL 2370 | Studies in Literature | 3       |
| ENGL 2371 | Studies in Literature | 3       |
| For.ign Language or American Sign Language | 3 |

HUMA 1301 Introduction to Humanities | 3
MUSI 1306 Music Appreciation | 3
PHIL 1301 Introduction to Philosophy | 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ASSOCIATE DEGREE NURSING

El Centro only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.NURSING

The Associate Degree Nursing Program is a two-year, 72 credit hour program, leading to the Associate in Applied Sciences Degree; The program prepares graduates to be eligible to write the NCLEX-RN Examination to become licensed as a Registered Nurse (R.N.) in Texas. The program is accredited by the Board of Nurse Examiners for the State of Texas, (333 Guadalupe, Suite 3-460, Austin, Texas 78701: Telephone number 512-305-7400) and the National League for Nursing Accrediting Commission (350 Hudson St., New York, New York 10014: Telephone number 404-679-4501).

The program combines classroom and skills laboratory experience with hospital clinical experience.

The program offered at Brookhaven is under the administration and accreditation of the El Centro College Associate Degree Nursing Program. Students apply for admission and attend classes at Brookhaven but receive their degrees from El Centro.

Contact the Assessment Center at El Centro College for the pre-entrance assessment and, Health Occupations Admissions to receive an information packet.

ADMISSION TO THE PROGRAM

Applicants are rank ordered for admission based on the G.P.A. earned on four prerequisite courses.

Applicants must:
1. Fulfill all requirements for admission to both the college and the Associate Degree Nursing Program.
2. Complete the designated assessment testing process and any required remediation.
3. Complete the four prerequisite courses in English, Biology, Psychology and Mathematics with a cumulative grade point average of 2.5 or better.
4. Submit a completed admission application packet to the nursing admission office at El Centro or Brookhaven on or before the enrollment period deadline. Information sessions are available to further discuss the application process to the program.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding the transferability of DCCCD courses.

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<th>CREDIT HOURS</th>
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<tr>
<td>SEMESTER I</td>
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<tr>
<td>RNSG 1523 Introduction to Professional Nursing</td>
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<tr>
<td>RNSG 1460 Clinical - Nursing (R.N. Training)</td>
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<tr>
<td>BIOL 1472 Introduction to Human Anatomy and Physiology OR</td>
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<tr>
<td>BIOL 2402 Anatomy and Physiology II</td>
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<tr>
<td>PSYC 2314 Developmental Psychology</td>
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| SEMESTER II |
| RNSG 2504 Care of the Client with Common Health Care Needs | 5 |
| RNSG 1105 Nursing Skills I | 1 |
| RNSG 1461 Clinical - Nursing (R.N. Training) | 4 |
| BIOL 2420 General Microbiology | 4 |
| SPCH 1311 Introduction to Speech Communication | 3 |

| SEMESTER III |
| RNSG 2414 Care of the Client with Complex Health Care Needs | 4 |
| RNSG 2460 Clinical - Nursing (R.N. Training) | 4 |
| RNSG 2213 Mental Health Nursing | 2 |
| RNSG 2161 Clinical - Nursing (R.N. Training) | 1 |
| +Elective Humanities/Fine Arts | 3 |

| SEMESTER IV |
| RNSG 2535 Integrated Client Care Management | 5 |
| RNSG 2562 Clinical - Nursing (R.N. Training) | 5 |
| RNSG 2221 Management of Client Care | 2 |

Minimum Hours Required 72

+Humanities/Fine Arts Elective - must be selected from the following:

| ARTS 1301 | Art Appreciation | 3 |
| ENGL 1301 | (2000 level Literature course) | 3 |
| HUMA 1301 | Introduction to Humanities | 3 |
| MUSI 1306 | Music Appreciation | 3 |
| PHIL 1301 | Introduction to Philosophy | 3 |
| DRAM 1310 | Introduction to Theatre | 3 |

#Biol 1408 Biological Science or BIOL 1409 Biological Science is recommended prior to BIOL 1470 Introduction to Human Anatomy and Physiology if no previous high school biology.

A grade of "C" or better is required for all courses. Support courses must be completed before or during the semester indicated.
TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Nursing and provides the student advanced skills required by the industry to specialize in Perioperative Nursing.

PERIOPERATIVE NURSE INTERNSHIP

El Centro only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.NURS.PERIOP.INTERN

This two-semester program offers registered and graduate nurses the opportunity to acquire additional theory and skills required for patient care in the surgical setting. The perioperative approach to patient care is employed. Principles of surgical asepsis, patient care, use of surgical supplies and equipment, and ethical/legal aspects are presented. The emphasis of the program is on the scrub and circulating roles in perioperative nursing. Nurses enrolled in this program must hold a current license from the Board of Nurse Examiners for the State of Texas, or be a graduate of a nursing program eligible for the next NCLEX-RN examination.

CREDIT HOURS

PREREQUISITES

Nurses enrolled in this program must hold a current license from the Board of Nurse Examiners for the State of Texas, or be a graduate of a nursing program eligible for the next NCLEX-RN examination. Current CPR certification.

SEMESTER I

SRGT 1471 Perioperative Nurse Internship I .......... 4
SRGT 1167 Practicum (or Field Experience) - Surgical/Operating Room Technician.................................. 5

SEMESTER II

SRGT 2571 Perioperative Nurse Internship II .......... 5
SRGT 2366 Practicum (or Field Experience) - Surgical/Operating Room Technician.................................. 8

Minimum Hours Required........................................... 13

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.
ASSOCIATE DEGREE NURSING -- LVN OPTION

El Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.NURSING.LVN

A Licensed Vocational Nurse in Texas may qualify to complete the Associate Degree Nursing program at an accelerated pace. Students must meet all entrance requirements for the Associate Degree Nursing Program, and complete twenty-seven hours of prerequisite courses to enter this articulation option. Upon completion of the "bridging" course, which focuses on the change in role from LVN to RN, the student is granted equivalency credit for the first two semesters of the Associate Degree Nursing Program. The student will then complete the second year of the curriculum. Graduates of this program will receive an Associate in Applied Sciences Degree, and they will be eligible to write the NCLEX-RN Examination to become licensed as a Registered Nurse (RN) in Texas.

ADMISSION TO THE PROGRAM:

Applications are rank ordered for admission based on the G.P.A. earned on four prerequisite courses.

Applicants must:

1. Fulfill any requirements for admission to both the college and the Associate Degree Nursing Program.
2. Complete the designated assessment testing process and any required remediation.
3. Complete the four prerequisite courses in English, Biology, Psychology and Mathematics with a grade point average of 2.5 or better. Complete the remaining prerequisite courses with a grade of "C" or better.
4. Submit a completed admission application packet to the nursing admission office at El Centro on or before the enrollment period deadline. Information sessions are available to further discuss the application process to the program.
5. Successfully complete a check-off procedure to validate proficiency in basic nursing skills and math.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

PREREQUISITES:

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<td>Biol 1472 Introduction to Human Anatomy and Physiology OR...4</td>
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<td>Biol 2402 Anatomy and Physiology II ...(4)</td>
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<td>Biol 2420 General Microbiology ....4</td>
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<td>MATH 1314 College Algebra ....3</td>
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<td>PSYC 2301 Introduction to Psychology ....3</td>
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<td>PSYC 2314 Developmental Psychology ....3</td>
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<td>SPCH 1311 Introduction to Speech Communication ....3</td>
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SEMMESTER I

RNSG 1327 Transition from Vocational to Professional Nursing ....3
RNSG 1170 ADN Bridge Nursing Skills ....1
RNSG 1160 Clinical - Nursing (R. N. Training) ....1

SEMMESTER II

RNSG 2414 Care of the Client with Complex Health Care Needs ....4
RNSG 2460 Clinical - Nursing (R. N. Training) ....4
RNSG 2213 Mental Health Nursing ....2
RNSG 2161 Clinical - Nursing (R. N. Training) ....1
+E elective Humanities/Fine Arts ....3

SEMMESTER III

RNSG 2555 Integrated Client Care Management ....5
RNSG 2562 Clinical - Nursing (R. N. Training) ....5
RNSG 2221 Management of Client Care ....2

Minimum Hours Required ....72

Upon successful completion of RNSG 1327, 14 hours of equivalency credit for RNSG 1523, RNSG 1460, RNSG 2504, RNSG 1195, RNSG 1461 are awarded in addition to the 3 credit hours earned from RNSG 1327, 1 credit hour from RNSG 1105, and 1 credit hour from RNSG 1161.

+Humanities/Fine Arts Elective - must be selected from the following:

| ARTS 1301 | Art Appreciation ....3 |
| ENGL 2000 level Literature course ....3 |
| HUMA 1301 | Introduction to Humanities ....3 |
| MUSI 1306 | Music Appreciation ....3 |
| PHIL 1301 | Introduction to Philosophy ....3 |
| DRAM 1310 | Introduction to Theatre ....3 |

# BIOL 1408 Biological Science or BIOL 1409 Biological Science is recommended prior to Biology 1470 Introduction to Human Anatomy and Physiology if no previous high school Biology.

A grade of "C" or better is required for all courses. Support courses must be completed before or during the semester indicated.
AUTO BODY TECHNOLOGY

Eastfield only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.AUTO.BODY

This program introduces the student to all facets of auto body repair and painting. Emphasis is placed upon the development of the necessary skills and knowledge required to function successfully in this industry. The program of study includes technical aspects of metal behavior combined with correct repair and refinishing procedures.

CREDIT HOURS

SEMESTER I
ABDR 1519 Basic Metal Repair ......................5
ABDR 1431 Basic Refinishing .........................4
WLDG 1391 Special Topics in Welder/ Welding
   Technologist ...................................3
MATH 1374□ Technical Mathematics I .................3
   15

SEMESTER II
ABDR 1555 Minor Metal Repair .....................5
ABDR 1558 Intermediate Refinishing .................5
ENGL 1301 Composition I ...........................3,
SPCH 1311 Introduction to Speech
   Communication ..................................3
   16

SEMESTER III
ABDR 2537 Structural Analysis and Damage
   Repair V .......................................5
ABDR 2541 Major Collision Repair and Panel
   Replacement ....................................5
PHYS 1470 Applied Physics ............................4
PSYC 2301 Introduction to Psychology ...............3
   17

SEMESTER IV
ABDR 2353 Color Analysis and Paint Matching .......3
ABDR 2357 Collision Repair Shop Management ......3
ABDR 2355 Collision Repair Estimating ...............3
ABDR 2380 Cooperative Education-
   Auto/Automotive Body Repairer .................3
ABDR 2402 Auto Body Mechanical and Electrical
   Service .........................................4
HUMA 1301 Introduction to the Humanities ..........3
   19

Minimum Hours Required ................................67

☐ This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
AUTO BODY TECHNOLOGY

Eastfield only

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.AUTO.BODY

This program is designed to train a student in all facets of auto body repair and painting. Emphasis is placed upon those skills needed by the student to become a successful auto body repair person. This program offers the student a certificate in auto body technology upon successful completion of the program.

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**SEMESTER I**

ABDR 1519 Basic Metal Repair ..................5
ABDR 1431 Basic Refinishing ....................4
WLDG 1391 Special Topics in Welder/Welding Technician ..................3

12

**SEMESTER II**

ABDR 1555 Minor Metal Repair ..................5
ABDR 1558 Intermediate Refinishing ..............5
SPCH 1311 Introduction to Speech Communication ..................3

13

**SEMESTER III**

ABDR 2537 Structural Analysis and Damage Repair V ................................5
ABDR 2541 Major Collision Repair and Panel Replacement ..................5
MATH 1374 Technical Mathematics I ..................3

13

**SEMESTER IV**

ABDR 2353 Color Analysis and Paint Matching ....3
ABDR 2357 Collision Repair Shop Management ....3
ABDR 2355 Collision Repair Estimating ............3
ABDR 2380 Cooperative Education-

Auto/Automotive Body Repairer ..................3

12

Minimum Hours Required ..................................50

☐ This course has been or will be revised effective, Fall 2000.
AUTO BODY TECHNOLOGY--
AUTO BODY METAL TECHNICIAN

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.AUTO.BODY.METAL

Preparation for positions in the auto collision industry in the area of metal and structural repair. Courses include metal repair, frame repair, and major panel replacement. Students receive training using lab modules, live projects, and cooperative work experience.

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<td>WLDG 1391 Special Topics in Welder/ Welding Technologist</td>
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<td>SPCH 1311 Introduction to Speech Communication</td>
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<tbody>
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<td>ABDR 2537 Structural Analysis and Damage Repair V</td>
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<tr>
<td>ABDR 2380 Cooperative Education- Auto/Automotive Body Repairer</td>
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</table>

Minimum Hours Required 29

AUTO BODY TECHNOLOGY--
AUTO BODY PAINTER

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.AUTO.BODY.PAINT

Instruction leading to positions in the auto collision industry in the area of paint refinishing. Courses include surface preparation, overall refinishing, and paint mixing and tinting. Students receive training using lab modules, live projects, and cooperative work experience.

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<td>ABDR 1558 Intermediate Refinishing</td>
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<tr>
<td>ABDR 2353 Color Analysis and Paint Matching</td>
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<tr>
<td>ABDR 2380 Cooperative Education-Auto/Automotive Body Repairer</td>
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Minimum Hours Required 26
AUTO BODY TECHNOLOGY
AUTO BODY SHOP MANAGEMENT

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.AUTO.BODY.SHOP

Instruction leading to positions in management of auto collision facilities. Management positions include shop supervisors and managers, insurance estimators, supply sales, and factory product representatives. Classes are designed to provide a broad exposure to industry procedures and practices.

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<tr>
<td>SEMESTER I</td>
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<td>ABDR 2357</td>
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<tr>
<td>MATH 1371</td>
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</table>

Minimum Hours Required ......................................28

☐ This course has been or will be revised effective, Fall 2000.
AUTOMOTIVE TECHNOLOGY --
DEALERSHIP-SPONSORED
TECHNICIAN

Brookhaven only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.AT.DEALERSHIP

This specialized program is designed to prepare students
for entry-level employment as automotive technicians in
specific manufacturer's dealership service organizations.
Students entering this program must be sponsored by
participating dealerships approved by the College.
Emphasis is placed upon the development of the
necessary skills and knowledge required to function in
automotive dealerships repairing and maintaining
late-model automobiles with electronic systems.
This program includes operational theory, practical skills, and
accepted shop procedures reinforced by intensive practice
during cooperative work experience periods in the
sponsoring dealership.

CREDIT
HOURS

SEMESTER I
AUMT 1305 Introduction to Automotive Technology..................3
AUMT 1306 Automotive Engine Removal and Installation ................3
AUMT 1319 Automotive Engine Repair ..................................3
AUMT 1380 Cooperative Education - Auto/ Automotive Mechanic/Technician ....... 3
+MATH 1374 Technical Mathematics I ..................................3

SEMESTER II
AUMT 1307 Automotive Electrical Systems ..........................3
AUMT 1310 Automotive Brake Systems .................................3
AUMT 1316 Suspension and Steering ....................................3
AUMT 1381 Cooperative Education - Auto/ Automotive Mechanic/Technician ....... 3
PHYS 1405 Concepts in Physics ........................................4

SEMESTER III
AUMT 1345 Automotive Heating and Air Conditioning .................3
AUMT 2373 Automotive Electronics .....................................3
SPCH 1311 Introduction to Speech Communication ....................3

SEMESTER IV
AUMT 2317 Engine Performance Analysis I ................................3
AUMT 2334 Engine Performance Analysis II ............................3
AUMT 2375 Powertrain Diagnostics ....................................3
AUMT 2280 Cooperative Education - Auto/ Automotive Mechanic/Technician ....... 2
ENGL 1301 Composition I ................................................3
PSYC 2302 Applied Psychology ..........................................3

SEMESTER V
AUMT 2313 Manual Drive Train and Axles ..............................3
AUMT 2325 Automatic Transmission and Transaxle ....................3
AUMT 2374 Automatic Transmission and Transaxle II ..................3
AUMT 2381 Cooperative Education - Auto/ Automotive Mechanic/Technician ....... 3
HUMA 1301 Introduction to the Humanities .........................15

Minimum Hours Required ................................................37

+MATH Elective -- Any student enrolling in MATH 1371, MATH 1373, or MATH 1374 [These courses have been or will be revised effective, Fall 2000.] must take one Dallas County Community College District natural science course approved by the Automotive Department. Other college level Math meets the requirement for Math and Natural Science.

□ This course has been or will be revised effective, Fall 2000.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.
AUTOMOTIVE TECHNOLOGY – SERVICE TECHNICIAN

Brookhaven, Cedar Valley and Eastfield only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.AT.SERVICE.TECH

The purpose of this program is to prepare students for entry level employment as an automotive technician. This program reflects a building-block approach from simple to complex and includes theory, diagnosis, repair and maintenance of automobiles, including late model vehicles with electronic systems. Emphasis is placed on operational theory, practical skills and accepted shop procedures.

CREDIT HOURS

SEMESTER I
AUMT 1305 Introduction to Automotive Technology ...........................................3
AUMT 1306 Automotive Engine Removal and Installation ........................................3
AUMT 1319 Automotive Engine Repair .................................................................3
SPCH 1311 Introduction to Speech Communication ................................................3

SEMESTER II
AUMT 1307 Automotive Electrical Systems ..........................................................3
AUMT 1310 Automotive Brake Systems ................................................................3
AUMT 1316 Suspension and Steering ....................................................................3
+Elective Math OR MATH 1314 College Algebra OR .............................................3
+Elective Math OR MATH 1414 College Algebra ..................................................(4)

SEMESTER III
+++Elective Humanities/Fine Arts ........................................................................3
++Elective Natural Science .........................................................................................(4)

SEMESTER IV
AUMT 1345 Automotive Heating and Air Conditioning ............................................3
AUMT 2313 Manual Drive Train and Axles ............................................................3
AUMT 2373 Automotive Electronics ....................................................................3
ENGL 1301 Composition I .......................................................................................3

SEMESTER V
AUMT 2317 Engine Performance Analysis I ...........................................................3
AUMT 2334 Engine Performance Analysis II ...........................................................3
AUMT 2375 Powertrain Diagnostics .......................................................................3
AUMT 2380 Cooperative Education – Auto/ Automotive Mechanic/Technician ........3
PSYC 2302 Applied Psychology ............................................................................3

SEMESTER VI
AUMT 2325 Automatic Transmission and Transaxle ............................................3
AUMT 2374 Automatic Transmission and Transaxle II .........................................3
AUMT 2381 Cooperative Education – Auto/Automotive Mechanic/Technician ........3

Minimum Hours Required ..................................................................................63-68

+MATH Elective – Any student enrolling in MATH 1371, MATH 1373, or MATH 1374 [These courses have been or will be revised effective, Fall 2000] must take one Dallas County Community College District natural science course approved by the Automotive Department. (See below.) Other college level Math meets the requirement for Math and Natural Science.

++Natural Science Elective - Any student enrolling in MATH 1371, MATH 1373, or MATH 1374 [These courses have been or will be revised effective, Fall 2000] must take one Dallas County Community College District natural science course approved by the Automotive Department.

+++Humanities/Fine Arts Elective – Three hours from a Humanities/Fine Arts course. This includes any course with the title of Humanities, Art, Music, Philosophy, Dance, Drama, Religion, or Foreign Language.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.
AUTOMOTIVE TECHNOLOGY—CHASSIS SERVICE TECHNICIAN

Brookhaven, Cedar Valley and Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.AUMT.CHASSIS

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<td>AUMT 1305</td>
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Minimum Hours Required 21-22

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

AUTOMOTIVE TECHNOLOGY—ELECTRONICS AND CLIMATE CONTROLS TECHNICIAN

Brookhaven, Cedar Valley and Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.AUMT.ELEC.CLIM

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<td>Automotive Electrical Systems 3</td>
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<td>Any 1000 Level Math OR</td>
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<td>MATH 1314</td>
<td>College Algebra OR 3</td>
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<td>MATH 1414</td>
<td>College Algebra (4)</td>
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<td>AUMT 1345</td>
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<td>Cooperative Education – Auto/ Automotive Mechanic/Technician 3</td>
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<td>AUMT 2373</td>
<td>Automotive Electronics 3</td>
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</table>

Minimum Hours Required 18-19

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.
# AUTOMOTIVE TECHNOLOGY: ENGINE REPAIR AND PERFORMANCE TECHNICIAN

*Brookhaven, Cedar Valley and Eastfield only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.AUMT.ENGINE.PERF

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<td>AUMT 1307</td>
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<td>Engine Performance Analysis II ................................................. 3</td>
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<td>AUMT 2375</td>
<td>Powertrain Diagnostics .......................................................... 3</td>
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<tr>
<td>AUMT 2381</td>
<td>Cooperative Education – Auto/Automotive Mechanic/Technician ............ 3</td>
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<td>ENGL 1301</td>
<td>Composition I ........................................................................... 3</td>
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Minimum Hours Required .................................................. 27

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.

# AUTOMOTIVE TECHNOLOGY: TRANSMISSION SERVICE TECHNICIAN

*Brookhaven, Cedar Valley and Eastfield only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.AUMT.TRANSMISSION

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<td>Introduction to Automotive Technology ........................................... 3</td>
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<tr>
<td>AUMT 1307</td>
<td>Automotive Electrical Systems .................................................... 3</td>
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<tr>
<td>AUMT 2313</td>
<td>Manual Drive Train and Axles ...................................................... 3</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I ........................................................................... 3</td>
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<td>AUMT 2325</td>
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<td>AUMT 2374</td>
<td>Automatic Transmission and Transaxle II ..................................... 3</td>
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<td>AUMT 2380</td>
<td>Cooperative Education – Auto/Automotive Mechanic/Technician ............ 3</td>
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Minimum Hours Required .................................................. 21

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.
AUTOMOTIVE TECHNOLOGY—INDUSTRIAL EQUIPMENT

Eastfield only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.AT.INDUSTRIAL

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<td>AUMT 1307 Automotive Electrical Systems</td>
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<td>AUMT 1310 Automotive Brake Systems</td>
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<tr>
<td>AUMT 1316 Suspension and Steering</td>
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<td>AUMT 1345 Automotive Heating and Air Conditioning</td>
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<td>AUMT 2437 Automotive Electronics</td>
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<td>ENGL 1301 Composition I</td>
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<td>AUMT 2334 Engine Performance Analysis II</td>
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<td>AUMT 2375 Powertrain Diagnostics</td>
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<td>AUMT 2380 Cooperative Education – Auto/Automotive Mechanic/Technician</td>
<td>3</td>
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<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
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<td>+++Elective Humanities/Fine Arts</td>
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<td>AUMT 2376 Basic Hydraulics</td>
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<tr>
<td>AUMT 2340 Automotive Alternative Fuels</td>
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<tr>
<td>AUMT 2377 Electric Vehicle Motors and Controls</td>
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<td>AUMT 2381 Cooperative Education – Auto/Automotive Mechanic/Technician</td>
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<tr>
<td>+++Elective Social Science/Behavioral Sciences</td>
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Minimum Hours Required: 64-69

+MATH Elective – Any student enrolling in MATH 1371, MATH 1373, or MATH 1374 [These courses have been or will be revised effective, Fall 2000.] must take one Dallas County Community College District natural science course approved by the Automotive Department. (See below.) Other college-level Math meets the requirement for Math and Natural Science.

++Natural Science Elective - Any student enrolling in MATH 1371, MATH 1373, or MATH 1374 [These courses have been or will be revised effective, Fall 2000.] must take one Dallas County Community College District natural science course approved by the Automotive Department.

+++Humanities/Fine Arts Elective – Three hours from a Humanities/Fine Arts course. This includes any course with the title of Humanities, Art, Music, Philosophy, Dance, Drama, Religion, or Foreign Language.

++++Social Science/Behavioral Science Elective – Three credit hours from a Social/Behavioral Science course: This includes Anthropology, Government, History, Human Development, Psychology, or Sociology.

NOTE: Some students enrolling in this program may plan to transfer to four-year institutions. They should consult with an advisor or counselor regarding transfer requirements and to identify how courses will transfer to the four-year institution of their choice.
AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT -- CONSTRUCTION EQUIPMENT

Eastfield only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.AT.DHE.CONST.EQU

Excavators, cranes, bulldozers, bob-cats, tractors, the monstrous yellow machines that busily construct. Our highways, shopping centers and homes are advanced instruments that require well-trained, highly skilled technicians to repair and maintain them. At Eastfield College, the Diesel and Heavy Equipment program provides an opportunity to train on the latest industry-standard equipment in the Heavy Equipment option.

After successful completion of Heavy Equipment course work, you may enter the field as an entry-level technician in the repair and maintenance of heavy construction equipment. Positions may be found in the following areas: equipment dealerships, construction contractors, mining, oil industries and other construction related industries.

CREDIT HOURS

SEMESTER I

AUMT 1305  Introduction to Automotive Technology ........................................... 3
DEMR 1410  Diesel Engine Testing and Repair I .................................................... 4
DEMR 1411  Diesel Engine Testing and Repair II ................................................... 4
MATH 1332  College Mathematics I ................................................................. 3
SPCH 1311  Introduction to Speech Communication ................................................. 3

SEMESTER II

AUMT 1307  Automotive Electrical Systems ....................................................... 3
AUMT 1345  Automotive Heating and Air Conditioning ........................................ 3
DEMR 1229  Preventative Maintenance .............................................................. 2
ENGL 1301  Composition I ................................................................................... 3
+Elective  Social/Behavioral Science .................................................................... 3

SEMESTER III

AUMT 1310  Automotive Brake Systems ............................................................... 3
AUMT 2313  Manual Drive Train and Axles ............................................................ 3
AUMT 2373  Automotive Electronics ................................................................... 3
DEMR 1416  Basic Hydraulics ............................................................................... 4

SEMESTER IV

DEMR 2334  Advanced Diesel Tune-up and Troubleshooting .................................. 3
DEMR 2335  Advanced Hydraulics ......................................................................... 3
DEMR 2432  Electronic Controls ............................................................................ 4
++Elective  Humanities/Fine Arts ........................................................................ 3

SEMESTER V

DEMR 2348  Failure Analysis ................................................................................ 3
DEMR 2542  Automatic Power Shift and Hydrostatic Transmissions I .................. 5
HEMR 1501  Tracks and Undercarriages .............................................................. 5

Minimum Hours Required ................................................................................. 70

+Elective--must be selected from the following:

ANTH 2351  Cultural Anthropology ....................................................................... 3
GOVT 2301  American Government ....................................................................... 3
GOVT 2302  American Government ....................................................................... 3
GOVT 2371  Introduction to Comparative Politics ............................................... 3
HIST 1301  History of the United States ................................................................ 3
HIST 1302  History of the United States ................................................................ 3
HIST 2311  Western Civilization ........................................................................... 3
HIST 2312  Western Civilization ........................................................................... 3
HDEV 1370  Educational and Career Planning ...................................................... 3
PSYC 2301  Introduction to Psychology .................................................................. 3
PSYC 2302  Applied Psychology ........................................................................... 3
PSYC 2314  Developmental Psychology ............................................................... 3
PSYC 2316  Psychology of Personality ................................................................ 3
SOCI 1301  Introduction to Sociology .................................................................. 3

++Elective--must be selected from the following:

ARTS 1301  Art Appreciation ................................................................................ 3
DRAM 1310  Introduction to Theater ...................................................................... 3
ENGL 2322  British Literature ................................................................................ 3
ENGL 2323  British Literature ................................................................................ 3
ENGL 2327  American Literature ......................................................................... 3
ENGL 2328  American Literature ......................................................................... 3
ENGL 2332  World Literature ................................................................................ 3
ENGL 2333  World Literature ................................................................................ 3
ENGL 2370  Studies in Literature .......................................................................... 3
ENGL 2371  Studies in Literature .......................................................................... 3
HUMA 1301  Introduction to the Humanities .......................................................... 3
MUSI 1306  Music Appreciation .......................................................................... 3
PHIL 1301  Introduction to Philosophy ................................................................ 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
The Heavy Truck Specialization curriculum is designed to train future technicians in maintaining and repairing heavy trucks. Upon completion of the course work, you may enter the field as an entry-level diesel heavy truck technician, or as a technicians helpers.

The Heavy Truck specialization offers the training you will need, and helps develop your potential to reach a supervisory position with truck dealerships, freight companies, contractors, oil and mining industries, and other related fields.

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<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<td>Basic Hydraulics</td>
<td>4</td>
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<td>IV</td>
<td>DEMR 2331</td>
<td>Advanced Brake Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DEMR 2334</td>
<td>Advanced Diesel Tune-up and Troubleshooting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DEMR 2432</td>
<td>Electronic Controls</td>
<td>4</td>
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<td>Humanities/Fine Arts</td>
<td>3</td>
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<tr>
<td>V</td>
<td>DEMR 1327</td>
<td>Tractor-Trailer Service and Repair</td>
<td>3</td>
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<td></td>
<td>DEMR 1447</td>
<td>Power Train II</td>
<td>4</td>
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<td>Advanced Hydraulics</td>
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<td></td>
<td>DEMR 2348</td>
<td>Failure Analysis</td>
<td>3</td>
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Minimum Hours Required: 70

+Elective—must be selected from the following:

| ARTS 1301 | Art Appreciation | 3 |
| DRAM 1310 | Introduction to Theater | 3 |
| ENGL 2322 | British Literature | 3 |
| ENGL 2323 | British Literature | 3 |
| ENGL 2327 | American Literature | 3 |
| ENGL 2328 | American Literature | 3 |
| ENGL 2332 | World Literature | 3 |
| ENGL 2333 | World Literature | 3 |
| ENGL 2370 | Studies in Literature | 3 |
| ENGL 2371 | Studies in Literature | 3 |
| HUMA 1301 | Introduction to the Humanities | 3 |
| MUSI 1306 | Music Appreciation | 3 |
| PHIL 1301 | Introduction to Philosophy | 3 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT—MAINTENANCE TECHNICIAN

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.AT.DHE.MAINT.TEC

This certificate prepares the student as an entry-level maintenance technician. Maintenance procedures and basic systems operations are studied.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>AUMT 1305 Introduction to Automotive Technology</td>
</tr>
<tr>
<td>AUMT 1307 Automotive Electrical Systems</td>
</tr>
<tr>
<td>AUMT 1310 Automotive Brake Systems</td>
</tr>
<tr>
<td>DEMR 1410 Diesel Engine Testing and Repair</td>
</tr>
<tr>
<td>MATH 1374 Technical Mathematics I OR +MATH 1332 College Mathematics I</td>
</tr>
<tr>
<td>Minimum Hours Required</td>
</tr>
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</table>

| SEMESTER II |
| AUMT 1345 Automotive Heating and Air Conditioning | 3 |
| AUMT 2373 Automotive Electronics | 3 |
| AUMT 2313 Manual Drive Trains and Axles | 3 |
| DEMR 1411 Diesel Engine Testing and Repair II | 4 |
| ENGL 1301 Composition I | 3 |
| Minimum Hours Required | 16 |

Minimum Hours Required ... 32

+Recommended for students who intend to pursue an Associate in Applied Sciences Degree in Diesel Technologies.

☐ This course has been or will be revised effective, Fall 2000.
AVIATION TECHNOLOGY--
PROFESSIONAL PILOT

Mountain View only

Because of the varied and interrelated aviation career options available, Mountain View's Aviation Technology Program is designed to allow students to take a group of core courses which includes selected aviation, business, English, mathematics and human relations courses and then proceed with specialized courses in the specific career option they wish to enter.

The Associate in Applied Sciences Degree options are (1) Professional Pilot; (2) Aircraft Dispatcher; and (3) Airport Management. A one-year certificate program is available in Aircraft Dispatcher.

AVIATION TECHNOLOGY --
PROFESSIONAL PILOT OPTION

Mountain View only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.AVIA.PROF.PILOT

The Professional Pilot Option provides students with flight training and ground school through the flight instructor certificate. All ground school instruction and flight training conform to Part 61 and 141 of the Federal Aviation Administration Regulations. Prior to admission to the program, registration and payment of fees, consultation with and approval by an Aviation Technology instructor is necessary. Simulator fees, flight fees and fees for pre- and post-flight briefings are in addition to the regular tuition charge.

Students completing this option may find employment opportunities as an airline pilot, corporate pilot, flight engineer, flight instructor and other general aviation positions. It is recommended that students in the Professional Pilot Option schedule flight training during the summer months in addition to the Spring and Fall semesters to aid in completing the program within a two year period.

Graduation requirements--Students in the Professional Pilot Option must successfully complete all required courses in the Professional Pilot curriculum. They must also complete all educational requirements imposed by the State of Texas. In addition, they must obtain the Private, Commercial (with the Instrument Rating), and Flight Instructor Certificates from the FAA.

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<tr>
<td>SEMESTER I</td>
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<tr>
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<td>MATH 1414</td>
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<td>SEMESTER II</td>
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<td>AIRP 1343</td>
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<td>AIRP 1255</td>
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<td>SEMESTER III</td>
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<td>AIRP 2337</td>
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<td>AIRP 2239</td>
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<td>AVIM 2337</td>
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<tr>
<td>+Elective</td>
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</table>

+Humanities/Fine Arts Elective must be selected from any Art, Humanities, Music or Philosophy Course.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
AVIATION TECHNOLOGY--
AIRCRAFT DISPATCHER

Mountain View only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.AVIA DISPATCHER

The job performed by an aircraft dispatcher is an integral part of the overall flight operations for airlines. An individual in this position works in conjunction with an airline pilot and is responsible for regulation compliance, weather and loading procedures prior to take-off. In the Aircraft Dispatcher Program students may earn a certificate after approximately one year or choose to complete the Associate in Applied Sciences Degree.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA knowledge examination for Aircraft Dispatcher and the practical examination for Aircraft Dispatcher.

Graduation requirements—Students in the Aircraft Dispatcher Option must successfully complete all required courses in the Aircraft Dispatcher curriculum. They must also complete all educational requirements imposed by the State of Texas. In addition, they must obtain the Aircraft Dispatcher Certificate from the FAA.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA knowledge examination for Aircraft Dispatcher and the practical examination for Aircraft Dispatcher.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA knowledge examination for Aircraft Dispatcher and the practical examination for Aircraft Dispatcher.

Minimum Hours Required

+Humanities/Fine Arts Elective must be selected from any Art, Humanities, Music or Philosophy Course.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
AVIATION TECHNOLOGY--
AIRCRAFT DISPATCHER

Mountain View only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.AVIA.DISPATCHER

The job performed by an aircraft dispatcher is an integral part of the overall flight operations for airlines. An individual in this position works in conjunction with an airline pilot and is responsible for regulation compliance, weather and loading procedures prior to take-off. In the Aircraft Dispatcher Program students may earn a certificate after approximately one year or choose to complete the Associate in Applied Sciences Degree.

Entry into either program will be in accordance with Federal Aviation Administration regulations and with instructor approval. Upon completion of the courses in the desired program, students may be recommended to apply to take the FAA knowledge examination for aircraft dispatcher and the FAA Practical Examination.

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<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>AIRP 1313 Introduction to Aviation</td>
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<tr>
<td>AIRP 1317 Private Pilot Ground School</td>
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<tr>
<td>AIRP 1311 Flight Theory</td>
<td>3</td>
</tr>
<tr>
<td>AIRP 1351 Instrument Ground School</td>
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<tr>
<td>AIRP 1307 Aviation Meteorology</td>
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<td>AIRP 2352 Practical Dispatching I</td>
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<td>AVIM 2337 Aviation Law</td>
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<td>AIRP 2355 Propulsion Systems</td>
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<td>AIRP 2333 Aircraft Systems</td>
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<td>AIRP 2337 Commercial Ground School</td>
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<tr>
<td>AIRP 2353 Practical Dispatching II</td>
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</table>

Minimum Hours Required.................. 33

Completion Requirements--Students in the Aircraft Dispatcher Option must successfully complete all required courses in the Aircraft Dispatcher curriculum. They must also complete all educational requirements imposed by the State of Texas. In addition, they must obtain the Aircraft Dispatcher Certificate from the FAA.
AVIATION TECHNOLOGY--AIRPORT MANAGEMENT

Mountain View only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.AIRP.MGMT

This option provides students with a general administrative overview combining aviation and business courses stressing terminology, management techniques and functions as they apply to the aviation industry. Students completing this program may qualify for support or training positions in airport management, as staff members to operations superintendents or aviation authority boards. Positions with fixed base operators such as aircraft dealers may include equipment and aircraft sales and service.

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**SEMESTER I**

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</tr>
<tr>
<td>AIRP 1317</td>
<td>Private Pilot Ground School</td>
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</tr>
<tr>
<td>AIRP 1311</td>
<td>Flight Theory</td>
<td>3</td>
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<td>ITSC 1401</td>
<td>Introduction to Computers</td>
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<td>BUSI 1301</td>
<td>Introduction to Business</td>
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19-20

**SEMESTER II**

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<td>Introduction to Speech Communication</td>
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<td>BMGT 1303</td>
<td>Principles of Management</td>
<td>3</td>
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<td>ENGL 1301</td>
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<tr>
<td>AIRP 1307</td>
<td>Aviation Meteorology</td>
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<tr>
<td>ACCT 2301</td>
<td>Principles of Accounting I OR</td>
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15-16

**SEMESTER III**

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<td>AVIM 2339</td>
<td>Aviation Marketing</td>
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<td>ACCT 2302</td>
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<td>ACCT 2402</td>
<td>Principles of Accounting II</td>
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<td>ECON 2301</td>
<td>Principles of Economics I</td>
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<tr>
<td>AVIM 2337</td>
<td>Aviation Law</td>
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15-16

**SEMESTER IV**

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<td>ECON 2302</td>
<td>Principles of Economics II</td>
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<tr>
<td>BUSI 2301</td>
<td>Business Law</td>
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<td>PSYC 2301</td>
<td>Introduction to Psychology</td>
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<td>+Elective</td>
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Minimum Hours Required: 64-67

+Humanities/Fine Arts Elective must be selected from any Art, Humanities, Music or Philosophy Course.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
BAKERYPASTRY

El Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.BAKERY/PASTRY

The Bakery/Pasty degree encompasses all aspects of bakery and pastry shop operations with an emphasis on preparation skills and business management.

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<tr>
<th>CREDIT</th>
<th>SEMESTER I</th>
<th>CULA 1305</th>
<th>Sanitation and Safety</th>
<th>3</th>
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<td>Fundamentals of Baking</td>
<td>OR</td>
<td>3</td>
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<td></td>
<td>PSTR 1305</td>
<td>Breads and Rolls</td>
<td>(3)</td>
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<tr>
<td></td>
<td>PSTR 1206</td>
<td>Cake Decorating I</td>
<td>2</td>
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<tr>
<td></td>
<td>PSTR 1207</td>
<td>Cake Decorating II</td>
<td>2</td>
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<tr>
<td></td>
<td>++TECM 1303</td>
<td>Technical Mathematics</td>
<td>AND</td>
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<th>RSTO 1313</th>
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<td>PSTR 1305</td>
<td>Breads and Rolls</td>
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<td></td>
<td>PSTR 1371</td>
<td>Bakery Operations and Management</td>
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<td>3</td>
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<td>RSTO 1306</td>
<td>Facilities, Layout and Design</td>
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<tr>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<th>CREDIT</th>
<th>SEMESTER IV</th>
<th>PSTR 1312</th>
<th>Laminated Dough, Pate a Choux, and Donuts</th>
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<tr>
<td></td>
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<td>Advanced Pastry Shop</td>
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<td>3</td>
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<td>RSTO 1380</td>
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<tr>
<td></td>
<td>PSTR 1310</td>
<td>Pies, Tarts, Teacakes, and Cookies</td>
<td></td>
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<td>Humanities/Fine Arts</td>
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<th>CULA 2341</th>
<th>Advanced Pastry/Culinary Competition</th>
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<td>PSYC 2301</td>
<td>Introduction to Psychology</td>
<td></td>
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Minimum Hours Required: 61-65

++Elective - must be selected from the following:

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<td>RSTO 1325</td>
<td>Purchasing for Hospitality Operations</td>
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<td>RSTO 2301</td>
<td>Principles of Food and Beverage Controls</td>
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<td></td>
<td>RSTO 1311</td>
<td>Marketing of Hospitality Services</td>
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<td>RSTO 1291</td>
<td>Special Topics in Food and Beverage/Restaurant Operations Manager</td>
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<td>Special Topics in Food and Beverage/Restaurant Operations Manager</td>
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++Elective - must be selected from the following:

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<td>American Literature</td>
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<td>HUMA 1301</td>
<td>Introduction to Humanities</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
<td></td>
<td>3</td>
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<tr>
<td></td>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>DRAM 1310</td>
<td>Introduction to Theatre</td>
<td></td>
<td>3</td>
</tr>
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</table>

+++Students selecting TECM 1303 must also select one of the following Natural Science courses:

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>SEMESTER V</th>
<th>BIOL 1408</th>
<th>Biological Science</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>BIOL 1409</td>
<td>Biological Science</td>
<td></td>
<td>4</td>
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<tr>
<td></td>
<td>ECOL 1305</td>
<td>People and Their Environment</td>
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<td>3</td>
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<td></td>
<td>GEOL 1403</td>
<td>Physical Geology</td>
<td></td>
<td>4</td>
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<td></td>
<td>PHYS 1311</td>
<td>Descriptive Astronomy</td>
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<td>3</td>
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<tr>
<td></td>
<td>PHYS 1401</td>
<td>Introductory General Physics</td>
<td></td>
<td>4</td>
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<td></td>
<td>PHYS 1415</td>
<td>Physical Science</td>
<td></td>
<td>4</td>
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</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
BAKERY/PASTRY

El Centro only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.FHSV.BAKERY

This certificate prepares the student to function as a bakery/pastry shop employee. All credits earned in this program may be applied toward the Associate in Applied Sciences Degree in Bakery/Pastry.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
<td></td>
</tr>
<tr>
<td>CULA 1305</td>
<td>Sanitation and Safety</td>
</tr>
<tr>
<td>PSTR 1301</td>
<td>Fundamentals of Baking</td>
</tr>
<tr>
<td>PSTR 1305</td>
<td>Breads and Rolls</td>
</tr>
<tr>
<td>PSTR 1206</td>
<td>Cake Decorating I</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

| SEMESTER II |       |
| RSTO 1313 | Hospitality Supervision | 3 |
| PSTR 1301 | Fundamentals of Baking | 3 |
| PSTR 1305 | Breads and Rolls | (3) |
| PSTR 1371 | Bakery Operations and Management | 3 |
| SPCH 1311 | Introduction to Speech Communication | 3 |
| **Total** | **12** |

| SEMESTER III |       |
| PSTR 1312 | Laminated Dough, Pate a Choux and Donuts | 3 |
| PSTR 2331 | Advanced Pastry Shop | 3 |
| RSTO 1380 | Cooperative Education - Food and Beverage/Restaurant Operations Manager | 3 |
| PSTR 1310 | Pies, Tarts, Teacakes, and Cookies | 3 |
| **Total** | **12** |

| SEMESTER IV |       |
| RSTO 2380 | Cooperative Education - Food and Beverage/Restaurant Operations Manager | 3 |
| +Elective |       |
| **Total** | **4-6** |

Minimum Hours Required: 39-41

+Elective - must be selected from the following:

| CULA 1301 | Basic Food Preparation | 3 |
| RSTO 1325 | Purchasing for Hospitality Operations | 3 |
| PSTR 1207 | Cake Decorating II | 2 |
| CULA 2341 | Advanced Pastry/Culinary Competition | 3 |
| RSTO 1311 | Marketing for Hospitality Services | 3 |
| RSTO 1191 | Special Topics in Food and Beverage/Restaurant Operations Manager | 1 |
| RSTO 1291 | Special Topics in Food and Beverage/Restaurant Operations Manager | 2 |
| RSTO 1391 | Special Topics in Food and Beverage/Restaurant Operations Manager | 3 |
BUSINESS ADMINISTRATION

Offered at all seven campuses

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.BUSI.ADMIN

The Associate in Applied Sciences Degree in Business Administration is designed for students seeking a broad program of study in all phases of business practices. This degree focuses not only on the core of management (principles of management, organizational behavior, and personnel administration) but also encompasses the critical areas of business operations (principles of marketing, accounting, and business law).

Credit Hours

| SEMESTER I       | BMGT 1303 Principles of Management ........................................... 3 | |
|                 | BUSI 1301 Introduction to Business .............................................. 3 | |
|                 | ENGL 1301 Composition I .............................................................. 3 | |
|                 | Mathematics* .................................................................................. 3-4 |
|                 | +Elective ............................................................................................ 3 | |
|                 | ........................................................................................................ 15-16 |
| SEMESTER II     | MRKG 1311 Principles of Marketing .................................................... 3 | |
|                 | ACCT 2301 Principles of Accounting I** OR ........................................... 3 | |
|                 | ACCT 2401 Principles of Accounting II................................................ (4) |
|                 | ENGL 1302 Composition II .................................................................... 3 | |
|                 | CISC 1470 Introduction to Computer Concepts and Applications .............. 4 | |
|                 | +Elective ............................................................................................ 3 | |
|                 | ........................................................................................................ 16-17 |
| SEMESTER III    | ACCT 2302 Principles of Accounting II OR ............................................ 3 | |
|                 | ACCT 2402 Principles of Accounting II................................................ (4) |
|                 | BUSI 2301 Business Law ....................................................................... 3 | |
|                 | ECON 2301 Principles of Economics I .................................................... 3 | |
|                 | PSYC 2302 Applied Psychology ........................................................... 3 | |
|                 | SPCH 1311 Introduction to Speech Communication ................................... 3 | |
|                 | ........................................................................................................ 15-16 |
| SEMESTER IV     | HRPO 2301 Human Resources Management ................................................ 3 | |
|                 | HRPO 2307 Organizational Behavior ....................................................... 3 | |
|                 | ECON 2302 Principles of Economics II ................................................ 3 | |
|                 | OFCT 2370 Business Communications .................................................... 3 | |
|                 | +Elective Humanities/Fine Arts ........................................................... 3 | |
|                 | Elective Any non-MGMT Course ............................................................ 3 | |
|                 | ........................................................................................................ 18 |
| Minimum Hours Required ................................................................. 64-67 |

**Electives—must be selected from the following:

- BMGT 1191 Special Topics in Business Administration and Management, General .......................... 1
- BMGT 1301 Supervision .......................................................... 3
- BMGT 1302 Principles of Retailing ............................................... 3
- BMGT 1333 Principles of Salesmanship ........................................... 3
- BMGT 1349 Advertising and Sales Promotion .................................. 3
- BMGT 1382 Cooperative Education-Business Administration and Management, General .................. 3
- BMGT 1381 Cooperative Education-Business Administration and Management, General .................. 3
- BMGT 1391 Special Topics in Business Administration and Management, General .................. 3
- BMGT 2331 Total Quality Management ........................................... 3
- BMGT 2382 Cooperative Education-Business Administration and Management, General .................. 3
- BUSG 1315 Small Business Operations ............................................. 3
- BUSG 1341 Small Business Financing .............................................. 3
- BUSG 2309 Small Business Management ........................................... 3
- IBUS 1305 Introduction to International Business and Trade .................. 3
- IBUS 1354 International Marketing Management .................................. 3
- IBUS 2335 International Business Law ............................................. 3
- IBUS 2339 International Banking and Finance ..................................... 3
- IBUS 2341 International Comparative Management .................................. 3
- OFCT 1372 Office Calculating Machines ........................................... 3
- OFCT 1375 Beginning Keyboarding ................................................... 3

++Electives—must be selected from the following:

- ARTS 1301 Art Appreciation .............................................................. 3
- DRAM 1310 Introduction to the Theatre ............................................... 3
- ENGL 2322 British Literature .............................................................. 3
- ENGL 2323 British Literature .............................................................. 3
- ENGL 2327 American Literature ......................................................... 3
- ENGL 2328 American Literature ......................................................... 3
- ENGL 2332 World Literature .............................................................. 3
- ENGL 2333 World Literature .............................................................. 3
- HUMA 1301 Introduction to the Humanities .......................................... 3
- MUSI 1306 Music Appreciation ........................................................... 3
- PHIL 1301 Introduction to Philosophy .................................................. 3

*Mathematics must be selected from the following:

- MATH 1314 College Algebra OR ........................................................... 3
- MATH 1414 College Algebra .................................................................. 4
- MATH 1324 Mathematics for Business and Economics I ....................... 3
- MATH 1342 Introductory Statistics ....................................................... 3
- MATH 1371 □ Business Mathematics ................................................... 3

**MATH 1371 MUST BE ACCOMPANIED BY A COURSE IN NATURAL SCIENCE.

**Students may substitute ACNT 1303 and ACNT 1304. Only three hours may be applied to the required number of hours for granting the degree.

□ This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
BUSINESS ADMINISTRATION - BUSINESS TRAINEE

Brookhaven only

The three levels of Business Trainee are designed to work with the student's career plans and to match the wide range of skill combinations needed at various entry level positions. Courses available for the various skill levels may be selected from but are not limited to the attached list of courses.

BUSINESS TRAINEE I
(Skills Achievement Award)

Degree Plan Code: SA.BUSI.TRAIN.I

<table>
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<th>CREDIT HOURS</th>
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<td></td>
<td>Any BUSG, BUSI, BMGT or IBUS 1300 or above*</td>
</tr>
<tr>
<td></td>
<td>Any ITSC, ITSW, POFI, POFT or MRKG 1200 or above**</td>
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Minimum Hours Required: 5-7

BUSINESS TRAINEE II
(Skills Achievement Award)

Degree Plan Code: SA.BUSI.TRAIN.II

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<th>SEMESTER I</th>
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</thead>
<tbody>
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<td></td>
<td>Any ACCT, ACNT or ECON 1300 or above***</td>
</tr>
<tr>
<td></td>
<td>Any ITSC, ITSW, POFI, POFT or MRKG 1200 or above**</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 5-8

Note: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

BUSINESS TRAINEE III
(Skills Achievement Award)

Degree Plan Code: SA.BUSI.TRAIN.III

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<td>Any BUSG, BUSI, BMGT or IBUS 1300 or above*</td>
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<tr>
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<td>Any ITSC, ITSW, POFI, POFT or MRKG 1200 or above**</td>
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<td></td>
<td>Any ACCT or ACNT 1300 or above****</td>
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Minimum Hours Required: 11-14

Note: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
CHILD DEVELOPMENT

Brookhaven and Eastfield only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.CHILD.DEVE

The Child Development Program offers students an in-depth study of young children from birth to twelve years of age in conjunction with the Parent/Child Study Center that provides students day-to-day involvement with young children. The program is designed to enable students to provide an optimal learning and caring environment for children.

CREDIT

HOURS

SEMESTER I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CDEC 1411</td>
<td>Introduction to Early Childhood Education OR</td>
<td>4</td>
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<tr>
<td>TECA 1311</td>
<td>Introduction to Early Childhood Education AND</td>
<td>(3)</td>
</tr>
<tr>
<td>CDEC 1174</td>
<td>Directed Participation in Child Development/Early Childhood+++</td>
<td>(1)</td>
</tr>
<tr>
<td>CDEC 1454</td>
<td>Child Growth and Development OR</td>
<td>4</td>
</tr>
<tr>
<td>TECA 1354</td>
<td>Child Growth and Development AND</td>
<td>(3)</td>
</tr>
<tr>
<td>CDEC 1175</td>
<td>Applied Learning in Child Development/Early Childhood+++</td>
<td>(1)</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 1301</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>+Elective</td>
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<td>3-4</td>
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<td><strong>17-18</strong></td>
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SEMESTER II

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<tr>
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<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CDEC 1413</td>
<td>Curriculum Resources for Early Childhood Programs</td>
<td>4</td>
</tr>
<tr>
<td>CDEC 1318</td>
<td>Nutrition, Health and Safety OR</td>
<td>3</td>
</tr>
<tr>
<td>TECA 1318</td>
<td>Nutrition, Health and Safety</td>
<td>(3)</td>
</tr>
<tr>
<td>CDEC 1319</td>
<td>Child Guidance</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>College Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>+Elective</td>
<td></td>
<td>3-4</td>
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<td><strong>16-17</strong></td>
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SEMESTER III

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<th>Course Title</th>
<th>Credit Hours</th>
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<tr>
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<td>Directed Participation in Child Development/Early Childhood+++ OR</td>
<td>1</td>
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<tr>
<td>CDEC 2475</td>
<td>Student Teaching in Child Development/Early Childhood I</td>
<td>(4)</td>
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<td>GOVT 2301</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>+Elective</td>
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<td>3</td>
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SEMESTER IV

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CDEC 1175</td>
<td>Applied Learning in Child Development/Early Childhood+++ OR</td>
<td>1</td>
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<tr>
<td>CDEC 2476</td>
<td>Student Teaching in Child Development/Early Childhood II</td>
<td>(4)</td>
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<tr>
<td>CDEC 2375</td>
<td>Abuse within the Family</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 1303</td>
<td>Family and the Community OR</td>
<td>3</td>
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<tr>
<td>TECA 1303</td>
<td>The Family and the Community</td>
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<tr>
<td>CDEC 1280</td>
<td>Cooperative Education - Early Childhood Provider/Assistant</td>
<td>2</td>
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<td>CDEC 2380</td>
<td>Cooperative Education - Early Childhood Provider/Assistant</td>
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<td>PSYC 2301</td>
<td>Introduction to Psychology OR</td>
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<td>PSYC 2302</td>
<td>Applied Psychology</td>
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<td>++Elective</td>
<td>Humanities/Fine Arts</td>
<td>(3-4)</td>
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Minimum Hours Required | 62-72

+Electives - must be selected from the following:

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<th>Credit Hours</th>
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<tbody>
<tr>
<td>CDEC 1178</td>
<td>Assessment of Prior Learning in Child Development/Early Childhood</td>
<td>1</td>
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<tr>
<td>CDEC 1315</td>
<td>Multicultural/ Multilingual Education</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 1317</td>
<td>Child Development Associate Training I</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 1323</td>
<td>Observation and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 1339</td>
<td>Early Childhood Development: 0-3 Years</td>
<td>3</td>
</tr>
<tr>
<td>CDEC 1335</td>
<td>Early Childhood Development: 3-5 Years</td>
<td>3</td>
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</tbody>
</table>

(continued on next page)
NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

Electives - must be selected from the following:

ARTS 1301 Art Appreciation ........................................ 3
HUMA 1301 Introduction to the Humanities ........................ 3
MUSI 1306 Music Appreciation ...................................... 3
SPAN 1411 Beginning Spanish (#) ............................... 3

#American Sign Language may not be substituted for this course.

CDEC 1174 Directed Participation in Childhood Development/Early Childhood and CDEC 1175 Applied Learning in Child Development/Early Childhood are taken as one-hour courses concurrently with CDEC courses. CDEC 1174 and CDEC 1175 must be repeated for credit for a total of eight (8) hours.

This is a Tech Prep program. Students interested in pursuing the Tech Prep advanced skills certificate need to consult their advisor.

Students planning on transferring to a four-year institution to complete a Bachelor's degree need to consult the Child Development Program Chair before taking any Child Development classes.
TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Child Development and provide the student advanced skills required by the industry to specialize as a Child Development Director in one of the following three categories:

ADMINISTRATOR

Brookhaven and Eastfield only

(Students pursuing this certificate program are required to meet all TASP requirements)

Degree Plan Code: ES.CHILD.ADMINISTRATOR

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tr>
<td>CDEC 2326</td>
<td>Administration of Programs for Children I .......................... 3</td>
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<tr>
<td>CDEC 2328</td>
<td>Administration of Programs for Children II .......................... 3</td>
</tr>
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</table>

Minimum Hours Required ..................................... 6

SPECIAL CHILD CAREGIVER

Brookhaven and Eastfield only

(Students pursuing this certificate program are required to meet all TASP requirements)

Degree Plan Code: ES.CHILD.SPECIAL

<table>
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<tr>
<td>CDEC 1359</td>
<td>Children with Special Needs ................................ 3</td>
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<tr>
<td>CDEC 1440</td>
<td>Instructional Techniques for Children with Special Needs .... 4</td>
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</table>

Minimum Hours Required ..................................... 7

INFANT AND TODDLER SPECIALIST

Brookhaven and Eastfield only

(Students pursuing this certificate program are required to meet all TASP requirements)

Degree Plan Code: ES.CHILD.INFANT

<table>
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<tr>
<td>CDEC 1339</td>
<td>Early Childhood Development: 0-3 Years ......................... 3</td>
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<tr>
<td>CDEC 1421</td>
<td>The Infant and Toddler ......................................... 7</td>
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Minimum Hours Required ..................................... 7
**SEMESTER I**

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<tr>
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<tbody>
<tr>
<td>CDEC 1411</td>
<td>Introduction to Early Childhood Education OR</td>
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<td>Introduction to Early Childhood Education AND</td>
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<tr>
<td>CDEC 1174</td>
<td>Directed Participation in Child Development/Early Childhood</td>
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</tr>
<tr>
<td>CDEC 1454</td>
<td>Child Growth and Development OR</td>
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<td>TECA 1354</td>
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<tr>
<td>CDEC 1175</td>
<td>Applied Learning in Child Development/Early Childhood</td>
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<tr>
<td>CDEC 2326</td>
<td>Administration of Programs for Children I</td>
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<tr>
<td>ENGL 1301</td>
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**SEMESTER II**

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<td>Nutrition, Health and Safety OR</td>
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<tr>
<td>TECA 1318</td>
<td>Nutrition, Health and Safety</td>
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<td>CDEC 1319</td>
<td>Child Guidance</td>
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<td>CDEC 2328</td>
<td>Administration of Programs for Children II</td>
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<td>CDEC 2336</td>
<td>Administration of Programs for Children III</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<td>ITSC 1401</td>
<td>Introduction to Computers OR</td>
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<td>MATH 1332</td>
<td>College Mathematics I OR</td>
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<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Economics I OR</td>
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Minimum Hours Required: 35-36

+Elective - may be selected from the following:

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<td>CDEC 1175</td>
<td>Applied Learning in Child Development/Early Childhood</td>
<td>1</td>
</tr>
<tr>
<td>CDEC 1303</td>
<td>Family and the Community</td>
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## CHILD DEVELOPMENT--EARLY CHILDHOOD TRAINING

*Brookhaven and Eastfield only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CHILD.EARLY

This certificate program provides general courses in early childhood for those wanting to increase their skills and knowledge for working with children.

| SEMESTER I | CDEC 1411 | Introduction to Early Childhood Education OR | 4 |
| TECA 1311 | Introduction to Early Childhood Education AND | (3) |
| CDEC 1174 | Directed Participation in Child Development/Early Childhood | (1) |
| CDEC 1454 | Child Growth and Development OR | 4 |
| CDEC 1399 | Early Childhood Development: 0-3 Years AND | (3) |
| CDEC 1335 | Early Childhood Development: 3-5 Years OR | (3) |
| TECA 1354 | Child Growth and Development AND | (3) |
| CDEC 1175 | Applied Learning in Child Development/Early Childhood | (1) |
| CDEC 1318 | Nutrition, Health, and Safety OR | 3 |
| TECA 1318 | Nutrition, Health, and Safety | (3) |
| CDEC 1319 | Child Guidance | 3 |
| PSYC 2301 | Introduction to Psychology OR | 3 |
| SOCI 1301 | Introduction to Sociology | (3) |
| +Elective | | | 3-4 |
| **TOTAL** | | | 20-23 |

| SEMESTER II | CDEC 1413 | Curriculum Resources for Early Childhood Programs | 4 |
| CDEC 1280 | Cooperative Education-Early Childhood Provider/Assistant OR | 2 |
| CDEC 2380 | Cooperative Education-Early Childhood Provider/Assistant OR | (3) |
| CDEC 2481 | Cooperative Education-Early Childhood Provider/Assistant | (4) |
| ENGL 1301 | Composition I | 6-8 |
| +Elective | | | 15-19 |

Minimum Hours Required: 35-42

+Elective—must be selected from the following:

| CDEC 1174 | Directed Participation in Child Development/Early Childhood | 1 |
| CDEC 1175 | Applied Learning in Child Development/Early Childhood | 1 |
| CDEC 1303 | Family and the Community OR | 3 |
| CDEC 1315 | Multicultural/Multilingual Education | 3 |
| CDEC 1317 | Child Development Associate Training I | 3 |
| CDEC 1323 | Observation and Assessment | 3 |
| CDEC 1356 | Emergent Literacy For Early Childhood | 3 |
| CDEC 1359 | Children with Special Needs | 3 |
| CDEC 1395 | Special Topics in Early Childhood Provider/Assistant | 3 |
| CDEC 1421 | The Infant and Toddler | 4 |
| CDEC 1434 | School Age Activities and Group Dynamics | 4 |
| CDEC 1440 | Instructional Techniques for Children with Special Needs | 4 |
| CDEC 2322 | Child Development Associate Training II | 3 |
| CDEC 2324 | Child Development Associate Training III | 3 |
| CDEC 2326 | Administration of Programs for Children I | 3 |
| CDEC 2328 | Administration of Programs for Children II | 3 |
| CDEC 2336 | Administration of Programs for Children III | 3 |
| CDEC 2375 | Abuse within the Family | 3 |
| CDEC 2441 | The School Age Child | 4 |
| SLNG 1404 | American Sign Language (ASL): Beginning I | 4 |
CHILD DEVELOPMENT -- INFANT-TODDLER

Brookhaven and Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CHILD.INFANT

This certificate program provides for an in-depth study of infant-toddler growth and development, programs, and services.

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<tr>
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Minimum Hours Required: 38

+Elective may be selected from the following:

- CDEC 1174 Directed Participation in Child Development/Early Childhood
- CDEC 1175 Applied Learning in Child Development/Early Childhood
- CDEC 1315 Multicultural/Multilingual Education
- CDEC 1317 Child Development Associate Training I
- CDEC 1323 Observation and Assessment
- CDEC 1359 Children with Special Needs
- CDEC 1395 Special Topics in Early Childhood Provider/Assistant
- CDEC 2322 Child Development Associate Training II
- CDEC 2324 Child Development Associate Training III
- CDEC 2380 Cooperative Education-Early Childhood Provider/Assistant
- SOCI 2301 Marriage, Family and Close Relationships
CHILD DEVELOPMENT --
SCHOOL AGE CAREGIVER

Brookhaven and Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CHILD.SCHOOL

This certificate program provides for an in-depth study of school-age growth and development, programs, and services. It is designed to enable students to provide an optimal learning environment for children in before- and after-school, recreational and summer programs.

CREDIT HOURS

SEMESTER I
CDEC 1330 Growth and Development: 6-14 Years .................................... 3
CDEC 1319 Child Guidance .......................................................... 3
CDEC 1303 Family and the Community OR ...... 3
TECA 1303 The Family and the Community OR .................................. (3)
CDEC 2375 Abuse within the Family .......... (3)
CDEC 1318 Nutrition, Health and Safety OR .... 3
TECA 1318 Nutrition, Health and Safety ........ (3)
ENGL 1301 Composition I ................................. 3-4
+Elective ............................................................... 18-19

SEMESTER II
CDEC 2441 The School Age Child .............. 4
CDEC 1434 School Age Activities and Group Dynamics .................. 4
CDEC 2380 Cooperative Education-Early Childhood Provider Assistant .......... 3
ITSC 1401 Introduction to Computers ............... 4
+Elective ........................................ 18-19

Minimum Hours Required........................................ 36-38

+Elective-may be selected from the following:
CDEC 1174 Directed Participation in Child Development/ Early Childhood .......... 1
CDEC 1175 Applied Learning in Child Development/ Early Childhood .......... 1
CDEC 1303 Family and the Community OR ...... 3
TECA 1303 The Family and the Community .................. 3
CDEC 1315 Multicultural/ Multilingual Education .................................. 3
CDEC 1323 Observation and Assessment ........................................ 3
CDEC 1440 Instructional Techniques for Children with Special Needs .......... 4
CDEC 2326 Administration of Programs for Children I .......... 3
CDEC 2328 Administration of Programs for Children II .......... 3
CDEC 2336 Administration of Programs for Children III .......... 3
CDEC 2375 Abuse within the Family .................. 3
## CHILD DEVELOPMENT -- SPECIAL CHILD

Brookhaven and Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CHILD.SPECIAL

This certificate program is planned to emphasize the needs of special children and their families.

### CREDIT HOURS

#### SEMESTER I

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<td>Nutrition, Health and Safety</td>
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<td>PSYC 2301</td>
<td>Introduction to Psychology OR</td>
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16

#### SEMESTER II

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18-21

Minimum Hours Required: 34-37

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<td>Child Development Associate Training I</td>
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<td>Growth and Development: 6-14 Years</td>
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125
COMMERCIAL MUSIC --
ARRANGER/COMPOSER/COPYIST

Cedar Valley only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.MUSIC.ARRANGER

This program is designed to prepare the student with the writing skills required for arranging and composing for small and large instrumental and vocal groups in all areas of commercial music, i.e., jazz, rock, pop, country/western. Standard manuscript techniques will be emphasized in actual writing assignments.

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<tr>
<td>MUSI 1181</td>
<td>Piano Class I .................. 1</td>
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<tr>
<td>MUSC 1327</td>
<td>Audio Engineering I .............. 3</td>
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<tr>
<td>MUSC 1303</td>
<td>History of Popular Music .............. 3</td>
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<td>MUSC 2141</td>
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<td>Music Theory III .............. 3</td>
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<td>MUSC 2319</td>
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Minimum Hours Required .................. 62-66

+Ensembles must be selected from the following:

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<td>Choir</td>
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<td>MUSI 1143</td>
<td>Vocal Ensemble</td>
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<td>MUSI 1126</td>
<td>Band</td>
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<td>MUSI 1133</td>
<td>Woodwind Ensemble</td>
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<td>MUSI 1134</td>
<td>Brass Ensemble</td>
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<td>MUSI 1138</td>
<td>Percussion Ensemble</td>
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<td>MUSI 1132</td>
<td>Keyboard Ensemble</td>
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<td>MUSI 1140</td>
<td>Symphonic Wind Ensemble</td>
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<td>MUSI 2127</td>
<td>Lab Band</td>
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<td>MUSI 1125</td>
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++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

+++Elective - Students may choose any Natural Science course listed in the catalog to meet this requirement.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMMERCIAL MUSIC -- PERFORMING MUSICIAN

Cedar Valley only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.MUSIC.PERFORMING

This program is designed to prepare the instrumental and vocal student for performances in commercial music, i.e., jazz, rock, pop, country/western. This training will include work in performance techniques, styles, solo and ensemble work, repertoire for small and large groups, and actual performances.

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**SEMESTER I**

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<td>MUSI 1181</td>
<td>Piano Class I</td>
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<td>MUSC 1327</td>
<td>Audio Engineering I</td>
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<td>MUSC 2141</td>
<td>Forum/Recital</td>
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<td>MUSC 1303</td>
<td>History of Popular Music</td>
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<td>Introduction to Speech Communication</td>
<td>3</td>
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<td>++Ensemble</td>
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**SEMESTER II**

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**SEMESTER IV**

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<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MUSC 2141</td>
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<td>MUSP 1242</td>
<td>Small Commercial Music Ensemble</td>
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<td>MUSC 2319</td>
<td>Orchestration</td>
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<td>MUSP 1391</td>
<td>Special Topics in Music -- General Performance</td>
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<tr>
<td>+++Elective</td>
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<tr>
<td>++Ensemble</td>
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<td>++Applied</td>
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Minimum Hours Required: 61-65

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+Ensembles must be selected from the following:

- MUSI 1137 Guitar Ensemble
- MUSI 2143 Choir
- MUSI 1143 Vocal Ensemble
- MUSI 1126 Band
- MUSI 1133 Woodwind Ensemble
- MUSI 1134 Brass Ensemble
- MUSI 1138 Percussion Ensemble
- MUSI 1132 Keyboard Ensemble
- MUSI 1140 Symphonic Wind Ensemble
- MUSI 2127 Lab Band
- MUSI 1125 Jazz Ensemble

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

+++Elective - Students may choose any Natural Science course listed in the catalog to meet this requirement.

**NOTE:** Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMMERCIAL MUSIC -
RECORDING TECHNOLOGY

Cedar Valley only

( Associate in Applied Sciences Degree)

Degree Plan Code: AAS.MUSIC.RECORDING

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

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**SEMESTER I**

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<td>MUSI 1116</td>
<td>Musicianship I</td>
<td>1</td>
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<td>MUSI 1181</td>
<td>Piano Class I</td>
<td>1</td>
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<tr>
<td>MUSC 1327</td>
<td>Audio Engineering I</td>
<td>3</td>
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<td>MUSC 2141</td>
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<td>1</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<td>MUSC 1303</td>
<td>History of Popular Music</td>
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**SEMESTER II**

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<td>Commercial Recording Techniques</td>
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<td>Audio Engineering II</td>
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<td>ENGL 1301</td>
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**Minimum Hours Required**

68-72

**SEMESTER IV**

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<td>Special Topics in Radio and TV Broadcasting Technology/Technician OR</td>
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**Minimum Hours Required**

17-18

++Ensembles must be selected from the following:

- Guitar Ensemble
- Choir
- Vocal Ensemble
- Band
- Woodwind Ensemble
- Brass Ensemble
- Percussion Ensemble
- Keyboard Ensemble
- Symphonic Wind Ensemble
- Lab Band
- Jazz Ensemble

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

+++Elective - Students may choose any Natural Science course listed in the catalog to meet this requirement.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMMERCIAL MUSIC -- MUSIC RETAILING

Cedar Valley only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.MUSIC.RETAILING

This program is designed to prepare the music major in retaining for the music industry job market. Training is provided in music skills as well as in business, i.e., business of music, salesmanship, small business management. The training is culminated with work experience coordinated through local merchants.

CREDIT HOURS

SEMESTER I

MUSI 1311 Music Theory I.............................3
MUSI 1116 Musicianship I.............................1
MUSI 1181 Piano Class I.............................1
MUSB 1305 Survey of the Music Business.............3
MUSC 2141 Forum/Recital............................1
BUSI 1301 Introduction to Business..................3
ENGL 1301 Composition I............................3
+Ensemble...........................................1
++Applied Music....................................1-2
17-18

SEMESTER II

MUSI 1312 Music Theory II...........................3
MUSI 1117 Musicianship II............................1
MUSI 1182 Piano Class II.........................1
MUSC 2141 Forum/Recital............................1
BMGT 1302 Principles of Retailing................3
MATH 1371 Business Mathematics..................3
SPCH 1311 Introduction to Speech Communication..3
+Ensemble...........................................1
++Applied Music....................................1-2
17-18

SEMESTER III

MUSC 1327 Audio Engineering I.......................3
MUSC 2141 Forum/Recital............................1
MUSB 1380 Cooperative Education - Music Business Management and Merchandising........3
BMGT 1333 Principles of Selling....................3
PSYC 2302 Applied Psychology......................3
++Applied Music....................................1-2
14-15

SEMESTER IV

MUSC 1331 Musical Instrument Digital Interface (MIDI) I.............................3
MUSC 2141 Forum/Recital............................1
MUSB 1380 Cooperative Education-Music Business Management and Merchandising........3
ACCT 2301 Principles of Accounting I................3
BUSG 2309 Small Business Management...............3
++Elective...........................................4
++Applied Music....................................1-2
18-19

Minimum Hours Required........................................66-70

+Ensembles must be selected from the following:

MUSI 1113 Guitar Ensemble..........................1
MUSI 2143 Choir.....................................1
MUSI 1143 Vocal Ensemble...........................1
MUSI 1126 Band.....................................1
MUSI 1133 Woodwind Ensemble........................1
MUSI 1134 Brass Ensemble...........................1
MUSI 1138 Percussion Ensemble.....................1
MUSI 1132 Keyboard Ensemble........................1
MUSI 1140 Symphonic Wind Ensemble................1
MUSI 2127 Lab Band..................................1
MUSI 1125 Jazz Ensemble............................1

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

+++Elective - Students may choose any Natural Science course listed in the catalog to meet this requirement.

☐ This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMMERCIAL MUSIC - RECORDING TECHNOLOGY

Cedar Valley only

(Certificate--Accelerated Program)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MUSI.RECORDING

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

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Minimum Hours Required ........................................ 33

+Elective must be selected from any music course.

COMMERCIAL MUSIC - RECORDING TECHNOLOGY

Cedar Valley only

(Certificate--Balanced Semester Program)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MUSI.BALANCED

This program is designed to prepare commercial musicians with additional skills in the field of recording technology. In addition to preparing the student in vocal or instrumental commercial music techniques, training is provided in the basic console recording skills such as microphone selection and placement, mix down techniques, master tape production, studio techniques, trouble-shooting, and session procedures. Emphasis is placed on the specific needs of the commercial musician in the field of recording.

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<td>MUSC 1303</td>
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<td>+Elective</td>
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<td>MUSB 1305</td>
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Minimum Hours Required ........................................ 33

+Elective must be selected from any music course.
COMMERCIAL MUSIC -- MUSIC RETAILING

Cedar Valley only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MUSI.RETAILING

This program is designed to prepare the music major in retailing for the music industry job market. Training is provided in music skills as well as in business, i.e., business of music, salesmanship, retailing techniques.

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<tr>
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<tr>
<td>MUSI 1300</td>
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<td>MUSI 1181</td>
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<tr>
<td>BUSI 1301</td>
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<td>+Ensemble</td>
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<td>++Applied Music</td>
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| SEMESTER II |
| MUSC 1331 | Musical Instrument Digital Interface | 3 |
| MUSC 2141 | Forum/Recital | 1 |
| SPCH 1311 | Introduction to Speech Communication | 3 |
| MATH 1371 | Business Mathematics | 3 |
| BMGT 1302 | Principles of Retailing | 3 |
| BMGT 1333 | Principles of Selling | 3 |
| +Ensemble | | 1 |
| ++Applied Music | | 1-2 |
| 18-19 |

Minimum Hours Required: 34-36

++Applied music courses to be selected from any music course numbered from MUAP 1101 through MUAP 1181 or MUAP 2201 through MUAP 2281.

☐ This course has been or will be revised effective, Fall 2000.
COMPUTER AIDED DESIGN AND
DRAFTING

Eastfield and Mountain View only

( Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.CADD

This program prepares the student for employment in a wide range of industries as a CAD operator, printed circuit board designer or technician. Information in related fields is provided to enable the student to work effectively with engineers, technologists, architects and professional staff. Enrollment in CADD cooperative work experience courses (co-op) provides students with on-the-job experience while in the program.

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**SEMESTER I**

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<td>GRPH 1322</td>
<td>Electronic Publishing I</td>
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<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra <strong>OR</strong></td>
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<td>College Algebra</td>
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**SEMESTER II**

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<td>CADD Operations</td>
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<td>Manufacturing Fundamentals <strong>OR</strong></td>
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<td>INMT 1343</td>
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**SEMESTER III**

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<td>DFTG 1394</td>
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<td>DFTG 2402</td>
<td>Machine Drafting OR</td>
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<td>Architectural Drafting-Commercial OR</td>
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<td>DFTG 2381</td>
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Minimum Hours Required ........................................ 66-67

+ DFTG Courses **must be selected from the following:**

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<td>DFTG 1224</td>
<td>Blueprint Reading and Sketching</td>
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<td>DFTG 1329</td>
<td>Electro-Mechanical Drafting</td>
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<td>DFTG 1333</td>
<td>Mechanical Drafting</td>
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<td>DFTG 1344</td>
<td>Pipe Drafting</td>
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<td>Topographical Drafting</td>
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<td>Special Topics in Architectural Drafting</td>
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<td>DFTG 1394</td>
<td>Special Topics in Electrical/Electronics Drafting</td>
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<td>Special Topics in Mechanical Drafting</td>
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<td>DFTG 2440</td>
<td>Solid Modeling/Design</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2350</td>
<td>Geometric Dimensioning and Tolerancing</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2356</td>
<td>Advanced Printed Circuit Board Design</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2374</td>
<td>Integrated Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2375</td>
<td>Advanced Integrated Circuit Design</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2402</td>
<td>Machine Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2432</td>
<td>Advanced Computer-Aided Drafting</td>
<td>4</td>
</tr>
</tbody>
</table>

++ ELECTIVE – must be selected from the DCCCD approved course list.

(continued on next page)

132
Electives must be selected from the following. Other technical courses approved by the Computer Aided Design and Drafting Department:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>CETT 1403</td>
<td>DC Circuits</td>
<td>4</td>
</tr>
<tr>
<td>CETT 1425</td>
<td>Digital Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ITNW 1321</td>
<td>Introduction to Networking</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>ITSC 2435</td>
<td>Application Problem Solving</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 1406</td>
<td>UNIX Operating System I</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1422</td>
<td>Introduction to C Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSC 1425</td>
<td>Personal Computer Hardware</td>
<td>4</td>
</tr>
<tr>
<td>PHTP 2203</td>
<td>Speed and Accuracy Building</td>
<td>2</td>
</tr>
<tr>
<td>SMFT 1343</td>
<td>Semiconductor Manufacturing Technology I</td>
<td>3</td>
</tr>
<tr>
<td>SRVY 1315</td>
<td>Surveying Calculations I</td>
<td>3</td>
</tr>
<tr>
<td>SRVY 1419</td>
<td>Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>SRVY 2305</td>
<td>Geographic Information Systems Applications</td>
<td>3</td>
</tr>
<tr>
<td>SRVY 1491</td>
<td>Special Topics in Surveying</td>
<td>4</td>
</tr>
</tbody>
</table>

+++Electives must be selected from these disciplines: Biology, Chemistry, Geology, Physics and Mathematics.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Computer Aided Design and Drafting and provides the student advanced skills required by the industry to specialize in Computer-Aided Design and Drafting.

COMPUTER AIDED DESIGN AND DRAFTING

Eastfield and Mountain View only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.CADD

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFTG 2336</td>
<td>Computer-Aided Drafting Programming OR</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1491</td>
<td>Special Topics in Drafting OR</td>
<td>(4)</td>
</tr>
<tr>
<td>DFTG 2380</td>
<td>Cooperative Education - Drafting</td>
<td>(3)</td>
</tr>
<tr>
<td>ITSE 1407</td>
<td>Introduction to C++ Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITNW 1321</td>
<td>Introduction to Networking</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 14-15

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.
COMPUTER-AIDED DESIGN AND DRAFTING - -
COMPUTER-AIDED DESIGN ADVANCED OPERATOR

Eastfield and Mountain View only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CADD.ADV.OPERAT

This certificate program prepares a student to become certified as an advanced CADD operator and enter the work force. Jobs performed would include making 2D and 3D CADD drawings using AutoCAD software. In addition, the student would be capable of customizing the AutoCAD program and have additional skills in solid modeling and specific areas of CADD.

CREDIT HOURS

SEMMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFTG 1405</td>
<td>Technical Drafting</td>
<td>4</td>
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<tr>
<td>DFTG 1409</td>
<td>Basic Computer Aided Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 1271</td>
<td>CADD Operations</td>
<td>2</td>
</tr>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
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</table>

SEMMESTER II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>DFTG 1452</td>
<td>Intermediate Computer-Aided Drafting</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra OR</td>
<td>4</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
<td>(3)</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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</tr>
<tr>
<td>DFTG 2312</td>
<td>Technical Illustration</td>
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<tr>
<td>+Elective</td>
<td>DFTG Course</td>
<td>3-4</td>
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</tbody>
</table>

Minimum Hours Required ........................................... 31

+DFTG Courses - must be selected from the following courses or other courses approved by the Computer-Aided Design and Drafting department:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DFTG 1215</td>
<td>Architectural Blueprint Reading</td>
<td>2</td>
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<tr>
<td>DFTG 1224</td>
<td>Blueprint Reading and Sketching - Mechanical</td>
<td>2</td>
</tr>
<tr>
<td>DFTG 1329</td>
<td>Electro-Mechanical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1333</td>
<td>Mechanical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1344</td>
<td>Pipe Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1348</td>
<td>Topographical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1358</td>
<td>Electrical/Electronics Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1392</td>
<td>Special Topics in Architectural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1394</td>
<td>Special Topics in Electrical/Electronics Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1395</td>
<td>Special Topics in Mechanical Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1417</td>
<td>Architectural Drafting - Residential</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 1421</td>
<td>Architectural Illustration</td>
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</tr>
<tr>
<td>DFTG 1454</td>
<td>Architectural Drafting - Commercial</td>
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</tr>
<tr>
<td>DFTG 1491</td>
<td>Special Topics in Drafting</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2304</td>
<td>Printed Circuit Board Design</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2310</td>
<td>Structural Drafting</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2336</td>
<td>Computer-Aided Drafting Programming</td>
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</tr>
<tr>
<td>DFTG 2340</td>
<td>Solid Modeling /Design</td>
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<tr>
<td>DFTG 2350</td>
<td>Geometric Dimensioning and Tolerancing</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2356</td>
<td>Advanced Printed Circuit Board Design</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 2374</td>
<td>Integrated Circuit Design</td>
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</tr>
<tr>
<td>DFTG 2375</td>
<td>Advanced Integrated Circuit Design</td>
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</tr>
<tr>
<td>DFTG 2402</td>
<td>Machine Drafting</td>
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</tr>
<tr>
<td>DFTG 2432</td>
<td>Advanced Computer-Aided Drafting</td>
<td>4</td>
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<tr>
<td>DFTG 2432</td>
<td>Advanced Computer-Aided Drafting</td>
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</tbody>
</table>
COMPUTER-AIDED DESIGN AND DRAFTING --
COMPUTER-AIDED DESIGN OPERATOR

Eastfield and Mountain View only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CADD.OPERATOR

This certificate program prepares a student to become certified as an entry-level CADD operator and enter the work force. Jobs performed would entail 2D and 3D CADD drawings using AutoCAD software.

CREDIT HOURS

SEMESTER I
DFTG 1405 Technical Drafting .................. 4
DFTG 1409 Basic Computer-Aided Drafting .... 4

8

SEMESTER II
DFTG 2312 Technical Illustration ............. 3
+ Elective DFTG Course ...................... 3-4
+ Elective DFTG Course ...................... 3-4

9-11

Minimum Hours Required ....................... 17-19

+ DFTG Courses - must be selected from the following courses or other technical courses approved by the Computer-Aided Design and Drafting department:

DFTG 1329 Electro-Mechanical Drafting .......... 3
DFTG 1333 Mechanical Drafting ................. 3
DFTG 1344 Pipe Drafting ....................... 3
DFTG 1348 Topographical Drafting ............. 3
DFTG 1358 Electrical/Electronics Drafting .... 3
DFTG 1392 Special Topics in Architectural Drafting ........................................ 3
DFTG 1394 Special Topics in Electrical/Electronics Drafting ................................ 3

DFTG 1395 Special Topics in Mechanical Drafting ........................................ 3
DFTG 1417 Architectural Drafting - Residential .... 4
DFTG 1421 Architectural Illustration .......... 4
DFTG 1452 Intermediate Computer-Aided Drafting .. 4
DFTG 1454 Architectural Drafting - Commercial ... 4
DFTG 1491 Special Topics in Drafting ........ 4
DFTG 2304 Printed Circuit Board Design .... 3
DFTG 2310 Structural Drafting ................ 3
DFTG 2336 Computer-Aided Drafting Programming .... 3
DFTG 2440 Solid Modeling/Design .......... 4
DFTG 2350 Geometric Dimensioning and Tolerancing .... 3
DFTG 2356 Advanced Printed Circuit Board Design ...... 3
DFTG 2374 Integrated Circuit Design ........ 3
DFTG 2375 Advanced Integrated Circuit Design ...... 3
DFTG 2402 Machine Drafting .................. 4
DFTG 2432 Advanced Computer-Aided Drafting .......... 4
COMPUTER-AIDED DESIGN AND
DRAFTING - -
INTEGRATED CIRCUIT DESIGN

Eastfield only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CAD.INTEGRA.CIR

The Integrated Circuit Design program trains the student

to prepare layout drawings and designs of integrated
circuits from schematics using computer-aided design
equipment. The program aids the student in developing
the skills necessary to convert logic diagrams to cell
drawings in accordance with design rules. Students will
perform design rule checks and prepare databases for
pattern generation. Emphasis is placed on working

closely with all members of the semiconductor
manufacturing design team.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SMFT 1343</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1409</td>
<td>4</td>
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<td>ENGL 1301</td>
<td>3</td>
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<tr>
<td>CETT 1403DC</td>
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<td>DFTG 1358</td>
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<td>MATH 1414</td>
<td>4</td>
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<tr>
<td>DFTG 2304</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 2435</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 2374</td>
<td>3</td>
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<tr>
<td>+Elective</td>
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<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>DFTG 2375</td>
<td>3</td>
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<tr>
<td>ITSW 1406</td>
<td>4</td>
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<tr>
<td>CETT 1425</td>
<td>4</td>
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<td>SPCH 1311</td>
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<td>+Elective</td>
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<tr>
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<th>CREDIT HOURS</th>
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<tbody>
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<tr>
<td>DFTG 1394</td>
<td>3</td>
</tr>
<tr>
<td>++Elective</td>
<td>3</td>
</tr>
<tr>
<td>+++Elective</td>
<td>3</td>
</tr>
<tr>
<td>+++Elective</td>
<td>4</td>
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</table>

Minimum Hours Required: 67-68

Social/Behavioral Science elective must be selected from the
DCCCD approved course list.

Technical elective must be selected from CISC, DFTG,
CETT, SMFT, GRPH, or other technical courses approved by the
Computer-Aided Design and Drafting program.

Students enrolling in this program who plan to
transfer to a four-year institution should consult an advisor
or counselor regarding transfer requirements and the
transferability of these courses to the four-year institution
of their choice.

NOTE: Students enrolling in this program who plan to

COMPUTER-AIDED DESIGN AND DRAFTING - - INTEGRATED CIRCUIT DESIGN

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CADD.INTERGRATE

This certificate program provides courses work to assist the student to prepare for entry-level positions in Integrated Circuit Design. Emphasis is placed on working closely with all members of the semiconductor design team.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>HOURS</td>
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<tr>
<td></td>
<td>DFTG 1409  Basic Computer-Aided Drafting........... 4</td>
</tr>
<tr>
<td></td>
<td>DFTG 1358  Electrical/Electronics Drafting ........3</td>
</tr>
<tr>
<td></td>
<td>CETT 1403DC Circuits................................4</td>
</tr>
<tr>
<td></td>
<td>DFTG 2374  Integrated Circuit Design...............3</td>
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<td>14</td>
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</table>

Minimum Hours Required .................................. 28

COMPUTER INFORMATION TECHNOLOGY-- CISCO NETWORKING INTERN

El Centro only

(Skills Achievement Award)

Degree Plan Code: SA.CISCO.NWK.INTERN

This sequence is for students who wish to learn about design and installation of local area networks, and basic router configuration. Upon completion, the student will have acquired the skills needed for employment in the networking industry as an intern.

Prerequisite: Basic understanding of personal computers and operating systems obtained in ITSC 1401 (Introduction to Computers) or equivalent experiences approved by an Information Technology faculty member.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>HOURS</td>
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<tr>
<td></td>
<td>ITNW 1313Local Area Networks Designs and Protocols: Cisco 1 ........3</td>
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<tr>
<td></td>
<td>ITNW 1317Basic Router Configuration: Cisco 2 ........3</td>
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</table>

Minimum Hours Required .................................. 6
COMPUTER INFORMATION TECHNOLOGY –
CISCO NETWORKING ASSISTANT

EI Centro only

(Skills Achievement Award)

Degree Plan Code: SA.CISCO.NWK.ASSIST

This sequence is for students who wish to develop skills in managing traffic and networking devices in local area networks (LAN) and wide area network (WAN) services and management. Upon completion, the student will have acquired skills needed to prepare for certification as a Cisco Certified Networking Associate (CCNA).

Prerequisite: Basic understanding of local area networks design and protocols and basic router configuration obtained in ITNW 1313 (Cisco 1) and ITNW 1317 (Cisco 2) or equivalent experiences approved by an Information Technology faculty member.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>ITNW 1340 Local Area Management (LAN): Cisco 3</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 1344 Wide Area Management (WAN): Cisco 4</td>
<td>3</td>
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</tbody>
</table>

Minimum Hours Required ........................................... 6

COMPUTER INFORMATION TECHNOLOGY–
PERSONAL COMPUTER TECHNOLOGY

Brookhaven only

(Skills Achievement Award)

Degree Plan Code: SA.CIT.PC

This sequence is for students interested in learning what goes on "under the cover" of a modern IBM-type personal computer. Completers will learn how a PC works and will also be able to write specifications for PCs, perform routine maintenance and be able to troubleshoot and repair simple problems.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSE 1405 Introduction to PC Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1425 Personal Computer Hardware</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2437 Assembly Language Programming</td>
<td>8</td>
</tr>
</tbody>
</table>

Minimum Hours Required ........................................... 12
### COMPUTER INFORMATION TECHNOLOGY--UNIX

*Brookhaven only*

(Skills Achievement Award)

Degree Plan Code: SA.CIT.UNIX

This sequence is for students interested in learning the UNIX Operating System up to an intermediate level. Topics covered include UNIX commands, file system structure, system editors and simple shell programming.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEMESTER I</strong></td>
</tr>
<tr>
<td>ITSW 1406 UNIX Operating System I ..................</td>
</tr>
<tr>
<td><strong>SEMESTER II</strong></td>
</tr>
<tr>
<td>ITSW 2436 UNIX Operating System II ................</td>
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</tbody>
</table>

Minimum Hours Required .................................. 8

### COMPUTER INFORMATION TECHNOLOGY -- VISUAL BASIC PROGRAMMING

*Brookhaven only*

(Skills Achievement Award)

Degree Plan Code: SA.CIT.VISUAL

This sequence is for students who wish to learn Visual BASIC programming. It includes instruction and practice in writing, executing, testing and debugging Visual BASIC programs on a personal computer. Topics such as forms, controls and interfacing with Windows applications are covered in detail.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td><strong>SEMESTER I</strong></td>
</tr>
<tr>
<td>ITSE 1431 Introduction to Visual BASIC Programming ..........</td>
</tr>
<tr>
<td><strong>SEMESTER II</strong></td>
</tr>
<tr>
<td>ITSE 2449 Advanced Visual BASIC Programming .................</td>
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</tbody>
</table>

Minimum Hours Required .................................. 8
COMPUTER INFORMATION TECHNOLOGY -- C PROGRAMMING

Brookhaven only

(Skills Achievement Award)

Degree Plan Code: SA.CIT.C-PROG

This sequence is for students who wish to learn the C programming language in depth. It includes instruction and practice in writing, executing, testing and debugging C programs on a personal computer. Object-oriented techniques are also covered in detail, providing a set of complete, well-rounded C user skills.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
<td>ITSE 1422 Introduction to C Programming</td>
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<tr>
<td></td>
<td>ITSE 2455 Advanced C Programming</td>
</tr>
<tr>
<td>SEMESTER II</td>
<td>ITSE 2421 Introduction to Object-Oriented Programming</td>
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</tbody>
</table>

Minimum Hours Required 12

COMPUTER INFORMATION TECHNOLOGY -- COBOL PROGRAMMING

Brookhaven only

(Skills Achievement Award)

Degree Plan Code: SA.CIT.COBO

This sequence is for students who wish to learn COBOL programming. It includes instruction in writing, executing, testing and debugging COBOL programs on a personal computer. Basic and advanced command syntax, file operations and common COBOL report generation logic are all covered in both classroom and laboratory environments.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
<td>ITSE 1418 Introduction to COBOL Programming</td>
</tr>
<tr>
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<td>ITSE 2451 Advanced COBOL Programming</td>
</tr>
<tr>
<td>SEMESTER II</td>
<td>ITSE 2421 Introduction to Object-Oriented Programming</td>
</tr>
</tbody>
</table>

Minimum Hours Required 8
COMPUTER INFORMATION TECHNOLOGY --
PERSONAL COMPUTER USER

Offered at all seven campuses

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CIT.PC.USER

This one semester certificate option is designed to provide training for those wishing to have a basic understanding of word processing, spreadsheets, database, and PC operating systems. The graduate will be qualified to use software applications.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>IITS 1401 Introduction to Word Processing OR .................. 4</td>
</tr>
<tr>
<td>IITS 2431 Advanced Word Processing ..........................(4)</td>
</tr>
<tr>
<td>IITS 1404 Introduction to Spreadsheets OR ................... 4</td>
</tr>
<tr>
<td>IITS 2434 Advanced Spreadsheets ...............................(4)</td>
</tr>
<tr>
<td>IITS 1407 Introduction to Database OR ...................... 4</td>
</tr>
<tr>
<td>IITS 2437 Advanced Database .................................(4)</td>
</tr>
<tr>
<td>IITS 1405 Introduction to PC Operating Systems .................. 4</td>
</tr>
</tbody>
</table>

Minimum Hours Required ........................................ 16

COMPUTER INFORMATION TECHNOLOGY --
PERSONAL COMPUTER TECHNICIAN

Offered at all seven campuses

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CIT.PC.TECH

This one semester certificate option is designed to provide training for those who want to concentrate on troubleshooting and solving elementary operating system, hardware, and networking problems. The graduate will be qualified to perform entry-level troubleshooting on personal computers.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>ITNW 1321 Introduction to Networking ......................... 3</td>
</tr>
<tr>
<td>IITS 1425 Personal Computer Hardware ..........................4</td>
</tr>
<tr>
<td>IITS 1410 Presentation Media Software OR .................... 4</td>
</tr>
<tr>
<td>IITS 1413 Internet/Web Page Development ........................(4)</td>
</tr>
<tr>
<td>IITS 1405 Introduction to PC Operating Systems .................. 4</td>
</tr>
</tbody>
</table>

Minimum Hours Required ........................................ 15
COMPUTER INFORMATION TECHNOLOGY -- PERSONAL COMPUTER SPECIALIST

Offered at all seven campuses

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: C2.CIT.PC.SPEC

This certificate option is designed to provide in-depth training in suite package software, operating systems, hardware, networking, and internet/web page development. The graduate will be qualified for a variety of entry-level positions in a pc-oriented environment.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
</table>

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>ITNW 1321</td>
<td>Introduction to Networking</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1405</td>
<td>Introduction to PC Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
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</table>

**SEMESTER II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ITSC 2435</td>
<td>Application Problem Solving</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 1401</td>
<td>Introduction to Word Processing OR</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 2431</td>
<td>Advanced Word Processing</td>
<td>(4)</td>
</tr>
<tr>
<td>ITSW 1404</td>
<td>Introduction to Spreadsheets OR</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 2434</td>
<td>Advanced Spreadsheets</td>
<td>(4)</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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**SEMESTER III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ITSW 1407</td>
<td>Introduction to Database OR</td>
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<tr>
<td>ITSW 2437</td>
<td>Advanced Database</td>
<td>(4)</td>
</tr>
<tr>
<td>ITSC 1425</td>
<td>Personal Computer Hardware</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 1410</td>
<td>Presentation Media Software OR</td>
<td>4</td>
</tr>
<tr>
<td>ITSC 1413</td>
<td>Internet/Web Page Development</td>
<td>(4)</td>
</tr>
<tr>
<td>Elective</td>
<td>Any ITXX Course</td>
<td>3-4</td>
</tr>
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</table>

Minimum Hours Required: 44-45
COMPUTER INFORMATION
TECHNOLOGY --
PERSONAL COMPUTER SUPPORT

Offered at all seven campuses

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CIT.PC.SUPPORT

This associate degree program trains the student to troubleshoot software and hardware problems, implementing corrections where possible; to evaluate new software and hardware; to install hardware and software, including equipment assembly and diagnostics; and to assist in the development and presentation of training courses for users. The graduate will be qualified to provide support for personal computer users in a corporate environment.

CREDIT HOURS

SEMESTER I
ITSC 1401 Introduction to Computers .................. 4
ITSC 2435 Application Problem Solving .................. 4
ITSC 1405 Introduction to PC Operating Systems ........ 4
ENGL 1301 Composition I .................................. 3

SEMESTER II
ITNW 1321 Introduction to Networking .................. 3
ITSW 1401 Introduction to Word Processing OR .......... 4
ITSW 2431 Advanced Word Processing ..................... 4
ITSW 1404 Introduction to Spreadsheets OR ............. 4
ITSW 2434 Advanced Spreadsheets ......................... 4
MATH 1342 Introductory Statistics OR .................... 3
MATH 1314 College Algebra OR ............................ 3
MATH 1414 College Algebra ................................ 4
SPCH 1311 Introduction to Speech Communication ........ 3

17-18

SEMESTER III
ITSW 1407 Introduction to Database OR ................. 4
ITSW 2437 Advanced Database .................................. 4
ITSC 1425 Personal Computer Hardware ................. 4
ITSW 1410 Presentation Media Software OR ............... 4
ITSC 1421 PC Operating Systems - Windows ............. 4
+Elective Social/Behavioral Science ..................... 3

15

SEMESTER IV
ITSC 1413 Internet/Web Page Development ............. 4
ITSC 2439 Personal Computer Help Desk ................. 4
ITSC 13XX Cooperative Education OR ..................... 3
Elective Any ITXX Course .................................. 3
++Elective Humanities/Fine Arts ......................... 3

14-15

Minimum Hours Required .................................. 61-63

+S/Behavioral Science elective must be selected from the DCCCD approved course list.

++Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
**COMPUTER INFORMATION TECHNOLOGY -- SOFTWARE PROGRAMMER/DEVELOPER ASSISTANT**

*Offered at all seven campuses*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CIT.SPD.ASSIST

This certificate option is designed to provide skills and knowledge in a primary programming language of choice, an operating system from the same platform, and database concepts. Graduates will be qualified to work as an assistant in a programming environment with data and coding.

### CREDIT HOURS

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ITSE X4XX</td>
<td>Introductory Programming course-List A</td>
<td>4</td>
</tr>
<tr>
<td>ITSC/ITSW</td>
<td>Operating Systems course-List C</td>
<td>4</td>
</tr>
<tr>
<td>IMSG 1407</td>
<td>Introduction to Database</td>
<td>4</td>
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</table>

**SEMESTER II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSE X4XX</td>
<td>Advanced Programming Language course-List B</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1410</td>
<td>Presentation Media Software OR</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>Any ITSE Course</td>
<td>3-4</td>
</tr>
<tr>
<td>Elective</td>
<td>Any ITSC/ITSE/ITSW Course</td>
<td>3-4</td>
</tr>
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</table>

Minimum Hours Required .................................. 22-24

*First in a two-course programming language series

**List A - Introductory Programming Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSE 1402</td>
<td>Introduction to Computer Programming</td>
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</tr>
<tr>
<td>ITSE 1407</td>
<td>Introduction to C++ Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1414</td>
<td>Introduction to RPG Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1418</td>
<td>Introduction to COBOL Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1422</td>
<td>Introduction to C Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1431</td>
<td>Introduction to Visual BASIC Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1445</td>
<td>Introduction to Oracle SQL and PL/SQL</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1491</td>
<td>Special Topics in Computer Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2401</td>
<td>Introduction to Windows Programming C++</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2405</td>
<td>Introduction to Windows Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2409</td>
<td>Introduction to Database Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2417</td>
<td>JAVA Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2421</td>
<td>Introduction to Object-Oriented Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2456</td>
<td>Oracle Database Administration I</td>
<td>4</td>
</tr>
</tbody>
</table>

**List B - Advanced Programming Language Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSE 2431</td>
<td>Advanced C++ Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2435</td>
<td>Advanced RPG Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2437</td>
<td>Assembly Language Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2439</td>
<td>Advanced Windows Programming Using C++</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2443</td>
<td>Advanced Windows Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2447</td>
<td>Advanced Database Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2449</td>
<td>Advanced Visual BASIC Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2451</td>
<td>Advanced COBOL Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2454</td>
<td>Advanced Oracle SQL and PL/SQL</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2455</td>
<td>Advanced C Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2457</td>
<td>Advanced Object-Oriented Programming</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2458</td>
<td>Oracle Database Administration II</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 2459</td>
<td>Advanced Computer Programming</td>
<td>4</td>
</tr>
</tbody>
</table>

**List C - Operating System Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSC 1405</td>
<td>Introduction to PC Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>ITSC 1417</td>
<td>PC Operating Systems - DOS</td>
<td>4</td>
</tr>
<tr>
<td>ITSC 1421</td>
<td>PC Operating Systems - Windows</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 1406</td>
<td>UNIX Operating System I</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 1411</td>
<td>AS/400 Operating System I</td>
<td>4</td>
</tr>
</tbody>
</table>

**Second in a two-course programming language series
COMPUTER INFORMATION TECHNOLOGY -- SOFTWARE PROGRAMMER/DEVELOPER

Offered at all seven campuses

( Associate in Applied Sciences Degree )

Degree Plan Code: AAS.CIT.PROG.DEVE

This associate degree program is designed to provide in-depth skills and knowledge in one primary programming language, and an operating system from the same platform, plus additional knowledge of a secondary language. The graduate will be qualified to work as an entry-level programmer in an applications setting to support the information processing function of the organization.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>SEMESTER II</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSC 1401 Introduction to Computers</td>
<td>ITSE X4XX Introductory Programming course-List A</td>
</tr>
<tr>
<td>ITSC 2435 Application Problem Solving</td>
<td>ITSE X4XX Advanced Programming course-List B*</td>
</tr>
<tr>
<td>ITNW 1321 Introduction to Networking</td>
<td>Elective Any ITXX Course</td>
</tr>
<tr>
<td>ENGL 1301 Composition I</td>
<td>Elective Any ITXX Course (3-4)</td>
</tr>
<tr>
<td></td>
<td>+Elective Humanities/Fine Arts</td>
</tr>
</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>SEMESTER IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSEX 4XX Introductory Programming course-List A or B OR</td>
<td>ITSE X4XX Programming course-List A or B OR</td>
</tr>
<tr>
<td>ITSE 1450 System Analysis and Design OR</td>
<td>ITSC/ITSE/ITSW 13XX Cooperative Education course</td>
</tr>
<tr>
<td>Elective Any ITXX Course</td>
<td>++Elective Social/Behavioral Science</td>
</tr>
<tr>
<td>+Elective Humanities/Fine Arts</td>
<td></td>
</tr>
</tbody>
</table>

Minimum Hours Required............................................ 63-67

+Humanities/Fine Arts elective must be selected from the DCCCD approved course list

++Social/Behavioral Science elective must be selected from the DCCCD approved course list

*First in a two-course programming language series

(continued on next page)
List A - Introductory Programming Courses

| ITSE 1402 | Introduction to Computer Programming | 4 |
| ITSE 1407 | Introduction to C++ Programming | 4 |
| ITSE 1414 | Introduction to RPG Programming | 4 |
| ITSE 1418 | Introduction to COBOL Programming | 4 |
| ITSE 1422 | Introduction to C Programming | 4 |
| ITSE 1431 | Introduction to Visual BASIC Programming | 4 |
| ITSE 1445 | Introduction to Oracle SQL and PL/SQL | 4 |
| ITSE 1491 | Special Topics in Computer Programming | 4 |
| ITSE 2401 | Introduction to Windows Programming | 4 |
| ITSE 2405 | Introduction to Windows Programming | 4 |
| ITSE 2409 | Introduction to Database Programming | 4 |
| ITSE 2417 | JAVA Programming | 4 |
| ITSE 2421 | Introduction to Object-Oriented Programming | 4 |
| ITSE 2456 | Oracle Database Administration I | 4 |

**Second in a two-course programming language series**

List B - Advanced Programming Language Courses

| ITSE 1491 | Special Topics in Computer Programming | 4 |
| ITSE 2431 | Advanced C++ Programming | 4 |
| ITSE 2435 | Advanced RPG Programming | 4 |
| ITSE 2437 | Assembly Language Programming | 4 |
| ITSE 2439 | Advanced Windows Programming Using C++ | 4 |
| ITSE 2443 | Advanced Windows Programming | 4 |
| ITSE 2447 | Advanced Database Programming | 4 |
| ITSE 2449 | Advanced Visual BASIC Programming | 4 |
| ITSE 2451 | Advanced COBOL Programming | 4 |
| ITSE 2454 | Advanced Oracle SQL and PL/SQL | 4 |
| ITSE 2455 | Advanced C Programming | 4 |
| ITSE 2457 | Advanced Object-Oriented Programming | 4 |
| ITSE 2458 | Oracle Database Administration II | 4 |
| ITSE 2459 | Advanced Computer Programming | 4 |

List C - Operating System Courses

| ITSC 1405 | Introduction to PC Operating Systems | 4 |
| ITSC 1417 | PC Operating Systems - DOS | 4 |
| ITSC 1421 | PC Operating Systems - Windows | 4 |
| ITSW 1406 | UNIX Operating System I | 4 |
| ITSW 1411 | AS/400 Operating System I | 4 |

List D - Application Development Courses

| ITSW 1404 | Introduction to Spreadsheets | 4 |
| ITSW 1406 | UNIX Operating System I | 4 |
| ITSC 1413 | Internet/Web Page Development | 4 |
| ITNW 1437 | Introduction to the Internet | 4 |
| ITSE 2413 | Web Authoring | 4 |
| ITSE 2437 | Advanced Database | 4 |
| ITSE 2445 | Data Structures | 4 |

COMPUTER INFORMATION TECHNOLOGY -- MIDRANGE ASSISTANT

El Centro only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CIT.MIDRNG.ASSIST

This one semester certificate option is designed to provide training primarily for persons with previous computer experiences who want to retrain quickly for AS/400 midrange environments.

Graduates will be qualified to enter the midrange environment in an entry-level system administration or junior programmer position.

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITNW 1321</td>
<td>Introduction to Networking OR</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1405</td>
<td>Introduction to PC Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>ITSW 1411</td>
<td>AS/400 Operating System I</td>
<td>4</td>
</tr>
<tr>
<td>ITSE 1414</td>
<td>Introduction to RPG Programming</td>
<td>4</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 15-16
COMPUTER INFORMATION TECHNOLOGY -- MIDRANGE TECH SUPPORT

El Centro only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CIT.MIDRNG.TECH

This one-year certificate option is designed to provide training for any student wishing to enter the midrange field through system administration. Skills and knowledge of the AS/400 operating system environment, control language, pc operating systems, and introductory networking concepts are developed. The graduate will be qualified to enter the midrange environment as a systems operator/administration trainee.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>ITSC 1401 Introduction to Computers .............. 4</td>
</tr>
<tr>
<td>ITSW 1411 AS/400 Operating System I ................ 4</td>
</tr>
<tr>
<td>ITSC 1405 Introduction to PC Operating Systems ................ 4</td>
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<tr>
<td>.......... 12</td>
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| SEMESTER II   |
| ITSW 2441 AS/400 Operating System II .............. 4 |
| ITSW 1402 Computer Control Language ................ 4 |
| ITNW 1321 Introduction to Networking ................ 3 |
| Elective Any ITXX Course .......................... 3-4 |
| .......... 14-15 |

Minimum Hours Required .................................. 26-27
COMPUTER INFORMATION TECHNOLOGY -- MIDRANGE SPECIALIST

El Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CIT.MIDRNG.SPEC

This associate degree program is designed to provide training in system administration, as well as midrange programming using the RPG language. Skills and knowledge of networking and hardware and PC operating systems are also developed. Graduates will be qualified to enter the midrange environment as a junior RPG programmer.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
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<tr>
<td>ITSW 1411 AS/400 Operating System</td>
<td>4</td>
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<td>ITSC 1405</td>
<td>Introduction to PC Operating Systems</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSW 1402</td>
<td>Computer Control Language</td>
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<tr>
<td>ITSW 2441 AS/400 Operating System II</td>
<td>4</td>
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<tr>
<td>ITSC 2435</td>
<td>Application Problem Solving</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Introductory Statistics OR</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Introduction to Networking</td>
</tr>
<tr>
<td>ITSE 1414</td>
<td>Introduction to RPG Programming</td>
</tr>
<tr>
<td>ITSC 1425</td>
<td>Personal Computer Hardware</td>
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<td>+Elective</td>
<td>Humanities/Fine Arts</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>ITSE 2435</td>
<td>Advanced RPG Programming</td>
</tr>
<tr>
<td>ITXX 138X</td>
<td>Cooperative Education course</td>
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<td>Elective</td>
<td>Any ITXX Course</td>
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<tr>
<td>++Elective</td>
<td>Social/Behavioral Science</td>
</tr>
</tbody>
</table>

Minimum Hours Required: 60-62

+Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

++Social/Behavioral Science elective must be selected from the DCCCD approved course list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMPUTER INFORMATION
TECHNOLOGY --
UNIX ADMINISTRATOR

Brookhaven, North Lake and Richland only

(Certificate)

(Students pursuing this certificate program
are waived from TASP requirements.)

Degree Plan Code: C1.CIT.UNIX.ADMIN

This certificate option prepares the student to be a UNIX
system administrator. Students will learn basic and
advanced hands-on skills associated with the UNIX user
interface environment, file system structure, account
setup and maintenance, system security, shell scripting
and other general tasks associated with day-to-day UNIX
management operations in both standalone and
networked systems. Multiple versions of UNIX such as
Solaris and/or Linux may be presented to better enable
student success in varying commercial environments.

CREDIT

HOURS

PREREQUISITES
ITSC 1401 Introduction to Computers .................. 4
ITSC 2435 Application Problem Solving ................. 4
ITNW 1321 Introduction to Networking .................. 3

Total: 11

SEMESTER I
ITSW 1406 UNIX Operating System I .................. 4

Total: 4

SEMESTER II
ITSW 2436 UNIX Operating System II .................. 4

Total: 4

SEMESTER III
ITNW 2435 Network Troubleshooting
and Support ........................................... 4
ITSW 1402 Computer Control Language ................ 4

Total: 8

Minimum Hours Required ............................... 27
COMPUTER INFORMATION TECHNOLOGY -- UNIX

Brookhaven, North Lake and Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CIT.UNIX

This associate degree program will provide training and education for individuals interested in developing their knowledge and skills as a UNIX user or system administrator. The objectives of the program are to provide instruction in both fundamental and advanced UNIX skills and to help the student acquire general knowledge about UNIX design and operation. Various versions of UNIX such as Solaris and/or Linux may be covered during the course of the program to better prepare students for real-world situations. The UNIX AAS degree includes all topics covered in the UNIX System Administrator certificate along with additional course work designed to provide a broad base of computer experience.

CREDIT HOURS

SEMESTER I
ITSC 1401 Introduction to Computers ............... 4
ITSC 2435 Application Problem Solving ............ 4
ITNW 1321 Introduction to Networking ............ 3
ENGL 1301 Composition I .......................... 3

14

SEMESTER II
ITSW 1406 UNIX Operating System I ............... 4
ITSC 1425 Personal Computer Hardware ............ 4
 Elective Any ITXX course .......................... 3-4
MATH 1414 College Algebra OR ..................... 4
MATH 1342 Introductory Statistics .................. (3)
SPCH 1311 Introduction to Speech Communication ........................................... 3

17-19

SEMESTER III
ITSW 2436 UNIX Operating System II ............... 4
 Elective Any ITXX course .......................... 3-4
ITSC X4XX Operating Systems course - List A ........ 4
 Elective Humanities/Fine Arts .................... 3

14-15

SEMESTER IV
ITNW 2435 Network Troubleshooting and Support ........................................... 4
ITSW 1402 Computer Control Language ............. 4
ITSE 1450 System Analysis and Design ............. 4
 Elective Social/Behavioral Science ................ 3

15

Minimum Hours Required .................................. 60-63

List A - Operating System courses:
ITSC 1405 Introduction to PC Operating Systems .... 4
ITSC 1417 PC Operating Systems - DOS .................. 4
ITSC 1421 PC Operating Systems - Windows ........... 4

++Humanities/Fine Arts elective must be selected from the DCCCD approved list.

+++ Social/Behavioral Science elective must be selected from the DCCCD approved list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMPUTER INFORMATION TECHNOLOGY -- NETWORKING ASSOCIATE

El Centro, Mountain View, North Lake and Richland only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CIT.NWK.ASSOC

This certificate option will provide education and training for individuals interested in developing their knowledge and skills as networking professionals with an emphasis on preparation for those wishing to take the CCNA certification examination.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>ITNW 1321 Introduction to Networking OR ........... 3</td>
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<td>Elective' Any ITXX Course OR .................(3)</td>
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<tr>
<td>Any ITXX Course ................................(4)</td>
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<tr>
<td>ITNW 1313 Local Area Networks Design and .......... 3</td>
</tr>
<tr>
<td>Protocols: Cisco 1</td>
</tr>
<tr>
<td>ITNW 1317 Basic Router Configuration: Cisco 2 ...... 3</td>
</tr>
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<td>9-10</td>
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</table>

| SEMESTER II   |
| ITNW 1340 Local Area Network Management |
| (LAN): Cisco 3 ................................... 3 |
| ITNW 1344 Wide Area Management (WAN): |
| Cisco 4 .......................................... 3 |
| 6             |

Minimum Hours Required .................................. 15-16

'Select any ITXX course, not included in this curriculum pattern.

Upon completion of ITNW 1344 Wide Area Management (WAN): Cisco 4, the student is eligible to take the CCNA (Cisco Certified Networking Associate) credentialing exam.

COMPUTER INFORMATION TECHNOLOGY -- NETWORKING SUPPORT

Brookhaven, Cedar Valley, Mountain View and North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CIT.NWK.SUPPORT

This certificate offers multiple speciality options for development of networking systems engineers, software developer, and database administrator. Students acquire knowledge and skills necessary to become expert on Microsoft products and technologies.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>MCSE-1</td>
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<tr>
<td>ITNW 1433 Microsoft Networking Essentials ........... 4</td>
</tr>
<tr>
<td>ITNW 2451 Microsoft Windows NT Core Technologies OR ........................................ 4</td>
</tr>
<tr>
<td>ITNW 1448 Implementing and Supporting Windows NT Workstation 4.0 ..........(4)</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MCSD-1</td>
</tr>
<tr>
<td>ITSE 1431 Introduction to Visual BASIC Programming OR ........................................ 4</td>
</tr>
<tr>
<td>ITSE 2449 Advanced Visual BASIC Programming ........................(4)</td>
</tr>
<tr>
<td>ITSE 2450 Mastering Enterprise Development Using Microsoft Visual Basic 6.0 .......... 4</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MCDBA-1</td>
</tr>
<tr>
<td>ITNW 2451 Microsoft Windows NT Core Technologies OR ........................................ 4</td>
</tr>
<tr>
<td>ITNW 1448 Implementing and Supporting Windows NT Workstation 4.0 ..........(4)</td>
</tr>
<tr>
<td>ITNW 1454 Implementing and Supporting Windows NT Server 4.0 ..........(4)</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>WIN 2000-1</td>
</tr>
<tr>
<td>ITNW 1458 Supporting Microsoft Windows 2000 .......... 4</td>
</tr>
<tr>
<td>ITNW 1419 Installing and Administering Windows 2000 .......... 4</td>
</tr>
</tbody>
</table>

(continued on next page)
### SEMESTER II

#### MCSE-2
- ITNW 1454: Implementing and Supporting Windows NT Server 4.0 ............................... 4
- ITNW 2456: Supporting Microsoft Windows NT Server 4.0 Enterprise Technologies .................. 4
- OR

#### MCSD-2
- ITSE 1444: Mastering Microsoft Visual Basic 6.0 Development ........................................ 4
- ITSE 1440: Mastering Distributed Application Design and Development Using Microsoft Visual Basic 6.0 ........................................ 4
- OR

#### MCDBA-2
- ITNW 2456: Supporting Microsoft Windows NT Server 4.0 Enterprise Technologies .................. 4
- ITNW 2452: Administering Microsoft SQL Server 7.0 .................................................. 4
- OR

#### WIN 2000-2
- ITNW 2457: Windows 2000 Active Directory .................................................................. 4
- ITNW 2401: Administering Microsoft Windows NT ......................................................... 4

### SEMESTER III

#### MCSE-3
- Elective .................................................................................................................. 4
- AND
- Elective .................................................................................................................. 4
- OR

#### MCSD-3
- ITSE 2445: Data Structures ...................................................................................... 4
- ITSE 2433: Implementing a Database on Microsoft SQL Server 7.0 OR ......................... 4
- Elective .............................................................................................................. (4)
- OR

#### MCDBA-3
- ITSE 2433: Implementing a Database on Microsoft SQL Server 7.0 AND .................. 4
- Elective .................................................................................................................. 4
- OR

#### WIN 2000-3
- Elective .................................................................................................................. 4
- AND
- Elective .................................................................................................................. 4
- Minimum Hours Required .................................................................................... 8

Minimum Hours Required .................................................................................. 24
COMPUTER INFORMATION TECHNOLOGY -- COMPUTER NETWORKING

Brookhaven, Cedar Valley, Mountain View and North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CIT.COM.P.NWK

The associate degree provides students with required technological skills to work in an evolving networking environment. Students who master course competencies can validate their skills through a certification program. Hands-on training and certification provide students with the tools and technologies to excel in networking positions. Topics include networking strategies, communications protocol, implementation, installation, configuration, and troubleshooting.

CREDIT HOURS

SEMESTER I

ITSC 1401 Introduction to Computers .............. 4
ITSC 2435 Application Problem Solving .......... 4
ITNW 1321 Introduction to Networking .......... 3
ENGL 1301 Composition I .................. 3

14

SEMESTER II

MCSE-1
ITNW 1433 Microsoft Networking Essentials ........ 4
ITNW 2451 Microsoft Windows NT Core
Technologies OR ........................................ 4
ITNW 1448 Implementing and Supporting
Windows NT Workstation 4.0 .............. (4)

OR

MCSD-1
ITSE 1431 Introduction to Visual Basic Programming OR .............. 4
ITSE 2449 Advanced Visual BASIC Programming .............. (4)
ITSE 2450 Mastering Enterprise Development Using Microsoft Visual Basic 6.0 ...... 4

OR

MCDBA-1
ITNW 2451 Microsoft Windows NT Core
Technologies OR ........................................ 4
ITNW 1448 Implementing and Supporting Windows NT Workstation 4.0 .............. (4)
ITNW 1454 Implementing and Supporting Windows NT Server 4.0 .............. 4

OR

WIN 2000-1
ITNW 1458 Supporting Microsoft Windows 2000 .............. 4
ITNW 1419 Installing and Administering Windows 2000 .............. 4
SPCH 1311 Introduction to Speech Communication .............. 3
MATH 1342 Introductory Statistics OR .............. 3
MATH 1414 College Algebra ..................... (4)

14-15

SEMESTER III

MCSE-2
ITNW 1454 Implementing and Supporting Windows NT Server 4.0 .............. 4
ITNW 2456 Supporting Microsoft Windows NT Server 4.0 - Enterprise Technologies .............. 4

OR

MCSD-2
ITSE 1444 Mastering Microsoft Visual Basic 6.0 Development .............. 4
ITSE 1440 Mastering Distributed Application Design and Development Using Microsoft Visual Basic 6.0 .............. 4

OR

MCDBA-2
ITNW 2456 Supporting Microsoft Windows NT Server 4.0 - Enterprise Technologies .............. 4
ITNW 2452 Administering Microsoft SQL Server 7.0 .............. 4

OR

WIN 2000-2
ITNW 2457 Windows 2000 Active Directory .............. 4
ITNW 2401 Administering Microsoft Windows NT .............. 4
+Elective Social/Behavioral Science .............. 3
++Elective Humanities/Fine Arts .............. 3

14

(continued on next page)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITSE 2445</td>
<td>Data Structures</td>
</tr>
<tr>
<td>ITSE 2433</td>
<td>Implementing a Database on Microsoft SQL Server 7.0</td>
</tr>
<tr>
<td>ITSE 2433</td>
<td>Elective</td>
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**MCSE-3**

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITNW 2452</td>
<td>Intemetnening Microsoft TCP/IP on Microsoft Windows NT 4.0</td>
</tr>
<tr>
<td>ITNW 2459</td>
<td>Creating and Managing a Web Server Using Microsoft Internet Information Server</td>
</tr>
<tr>
<td>ITSE 1440</td>
<td>Mastering Distributed Application Design and Development Using Microsoft Visual Basic 6.0</td>
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</table>

**MCSD-3**

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITNW 2452</td>
<td>Intemetnening Microsoft TCP/IP on Microsoft Windows NT 4.0</td>
</tr>
<tr>
<td>ITNW 2459</td>
<td>Creating and Managing a Web Server Using Microsoft Internet Information Server</td>
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</table>

**MCDBA-3**

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITNW 2454</td>
<td>Intemetnening Microsoft TCP/IP on Microsoft Windows NT 4.0</td>
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<tr>
<td>ITNW 2417</td>
<td>Network Security</td>
</tr>
<tr>
<td>ITNW 2452</td>
<td>Administering Microsoft SQL Server 7.0</td>
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**WIN 2000-3**

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ITNW 2452</td>
<td>Intemetnening Microsoft TCP/IP on Microsoft Windows NT 4.0</td>
</tr>
<tr>
<td>ITNW 2459</td>
<td>Creating and Managing a Web Server Using Microsoft Internet Information Server</td>
</tr>
<tr>
<td>ITSE 1440</td>
<td>Mastering Distributed Application Design and Development Using Microsoft Visual Basic 6.0</td>
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</table>

**Minimum Hours Required**

61-62

**NOTE:** Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
COMPUTER INFORMATION
TECHNOLOGY -- CNE 5

Richland only

(Certificate)

(Students pursuing this certificate program
are waived from TASP requirements.)

Degree Plan Code: C1.CIT.CNE5

This certificate will provide education and training for
individuals interested in developing their knowledge and
skills as networking professionals with an emphasis on
preparation for those wishing to take the CNE 5
certification examinations.

<table>
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<tr>
<th>CREDIT</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>ITNW 1420 NetWare 5 Administration</td>
<td>4</td>
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<tr>
<td>ITNW 1343 Network Technologies</td>
<td></td>
</tr>
<tr>
<td>(Novell 565)</td>
<td>3</td>
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<tr>
<td>ITNW 2438 NetWare 5 Advanced</td>
<td></td>
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<tr>
<td>Administration</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>11</td>
</tr>
<tr>
<td>SEMESTER II</td>
<td></td>
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<tr>
<td>ITNW 2342 Novell Directory Services (NDS)</td>
<td></td>
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<tr>
<td>Design and Implementation for NetWare 5</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 2431 Novell Service and Support</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>Any Novell networking course</td>
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</table>

Minimum Hours Required ...................................... 22

Elective - Any Novell networking course not part of this curriculum including ITNW 1492 Special Topics in Business Systems Networking and Telecommunications.

After completing courses in this certificate, students are eligible to take the CNE 5 (Certified Novell Engineer - NetWare 5) certification exams.
**COMPUTER INFORMATION TECHNOLOGY -- NT/WIN2000 NETWORKING**

*Eastfield and Richland only*

(Certificate)

*(Students pursuing this certificate program are required to meet all TASP requirements.)*

Degree Plan Code: C2.CIT.NT/Win.NWK

This certificate option will provide education and training for individuals interested in developing their knowledge and skills as networking professionals with an emphasis on preparation for those wishing to take MCSE certification examinations.

<table>
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<th>CREDIT HOURS</th>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td></td>
<td>ITSC 1401</td>
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<tr>
<td></td>
<td>ITSC 2435</td>
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<td>ITSC 1405</td>
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<td>ITNW 1321</td>
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<td></td>
<td>MATH 1324</td>
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<td>MATH 1342</td>
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<td>MATH 1314</td>
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<td>MATH 1414</td>
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<tbody>
<tr>
<td>ITNW 2401</td>
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<tr>
<td>ITNW 1419</td>
</tr>
<tr>
<td>ITNW 2451</td>
</tr>
<tr>
<td>ITNW 1458</td>
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<tr>
<td>ITNW 1452</td>
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<td>ENGL1301</td>
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<tr>
<td>SPCH1311</td>
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<th>SEMESTER III</th>
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<tbody>
<tr>
<td>ITNW 2456</td>
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<td>ITNW 2457</td>
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<td>ITNW 2458</td>
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<tr>
<td>Elective 1</td>
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</table>

Minimum Hours Required: 48-49

Elective 1: Any ITNW Microsoft networking course not part of the curriculum pattern, including ITNW 1492 Special Topics in Business Systems Networking and Telecommunications

After completing courses in this certificate, students are eligible to take the Microsoft Certified Product Specialist (MCP) and Microsoft Certified Systems Engineer (MCSE) credentialing exams.
COMPUTER INFORMATION TECHNOLOGY - NETWORK ADMINISTRATOR AND SUPPORT

Eastfield and Richland only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.CIT.NWK.ADMIN

This associate degree program will provide education and training for individuals interested in developing their knowledge and skills as networking professionals. The program also provides preparatory training for those wishing to take the MCSE, CNE-5, and CCNA certification examinations.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
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<td>ITSC 2435</td>
<td>Application Problem Solving</td>
<td>4</td>
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<tr>
<td>ITSC 1405</td>
<td>Introduction to PC Operating Systems</td>
<td>4</td>
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<tr>
<td>ITNW 1321</td>
<td>Introduction to Networking</td>
<td>3</td>
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<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Economics</td>
<td>3</td>
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<tr>
<td>MATH 1342</td>
<td>Introductory Statistics OR</td>
<td>3</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
<td>3</td>
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<td>MATH 1414</td>
<td>College Algebra</td>
<td>4</td>
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<tr>
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<tr>
<td>ITSC 1425</td>
<td>Personal Computer Hardware</td>
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<td>ITNW 2401</td>
<td>Administering Microsoft Windows NT OR</td>
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<td>ITNW 1419</td>
<td>Installing and Administering Windows 2000</td>
<td>4</td>
</tr>
<tr>
<td>ITNW 2451</td>
<td>Microsoft Windows NT Core Technologies OR</td>
<td>4</td>
</tr>
<tr>
<td>ITNW 1458</td>
<td>Supporting Microsoft Windows 2000</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>ITNW 1452</td>
<td>Internetworking Microsoft TCP/IP on Microsoft Windows NT 4.0</td>
<td>4</td>
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<tr>
<td>Elective 1</td>
<td>Any Microsoft networking course</td>
<td>4</td>
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<tr>
<td>ITNW 1313</td>
<td>Local Area Networks Design and Protocols: Cisco 1 OR</td>
<td>3</td>
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<td>ITNW 1420</td>
<td>NetWare 5 Administration</td>
<td>4</td>
</tr>
<tr>
<td>ITNW 1317</td>
<td>Basic Router Configuration: Cisco 2 OR</td>
<td>3</td>
</tr>
<tr>
<td>ITNW 2438</td>
<td>NetWare 5 Advanced Administration</td>
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<tr>
<td>Elective 2</td>
<td>Social/Behavioral Science</td>
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<td>17-19</td>
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<th>SEMESTER IV</th>
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<tr>
<td>ITNW 1340</td>
<td>Local Area Management (LAN): Cisco 3 OR</td>
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<td>ITNW 2342</td>
<td>Novell Directory Services (NDS) Design and Implementation for NetWare 5</td>
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<td>ITNW 1344</td>
<td>Wide Area Management (WAN): Cisco 4 OR</td>
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<td>ITNW 2431</td>
<td>Novell Service and Support</td>
<td>4</td>
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<td>ITNW 1280</td>
<td>Cooperative Education - Business Systems Networking and Telecommunications OR</td>
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<tr>
<td>ITNW 1292</td>
<td>Special Topics in Business Systems Networking and Telecommunications</td>
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<td>Elective 3</td>
<td>Management</td>
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<td>Humanities/Fine Arts</td>
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Minimum Hours Required ................................................................. 67-71

Elective 1 - Any Microsoft courses not part of the curriculum pattern including ITNW 1492 Special Topics in Business Systems Networking and Telecommunications

Elective 2 - The Social/Behavioral Science elective must be selected from the DCCCD approved course list.

Elective 3 - The Management elective must be selected from the following list: BMGT 1303 Principles of Management, BMGT 2301 Total Quality Management, or HRPO 2301 Human Resources Management.

Elective 4 - The Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
TECH PREP ENHANCED SKILLS
CERTIFICATE

This certificate option is attached to the Associate in Applied Sciences Degree in Network Administration and Support and provides the student with advanced skills required by the industry to specialize in Windows 2000 network design.

WIN2000 NETWORKING SPECIALIST

Richland only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.WIN.NWK.SPECIAL

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<td>ITNW 1492 Special Topics in Business Systems Networking and Telecommunications ................................ 4</td>
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<tr>
<td>ITNW 2457 Microsoft Windows 2000 Active Directory .................................................. 4</td>
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Minimum Hours Required ........................................... 8

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.
CONSTRUCTION MANAGEMENT AND TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CONSTRUCT.MANAGE

Construction Management is a relatively new discipline within the environmental design professions yet, virtually every commercial building project in the United States today—from the smallest retail "strip" center to the tallest skyscraper—requires construction leadership that is knowledgeable of labor; construction materials, installation methods and equipment; contract administration, construction scheduling, cost estimating and much more.

The Construction Management Curriculum at North Lake College prepares the student with the essential tools for a managerial career in construction or related industry endeavors. Such career positions could include project manager, field engineer, scheduler, specifier, sales representative, owner/developer liaison, estimator, purchaser, expediter, and inspector.

This program is fully accredited by the American Council for Construction Education. It is the only two-year accredited construction program in the State of Texas, and only the second to be accredited in the U.S.

Should the student decide to continue formal educational studies, this program articulates with major universities. Contact the Construction Management and Technology program coordinator for details.

CREDIT HOURS

SEMMESTER I

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>Introduction to Construction</td>
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<td>CNBT 1307</td>
<td>Commercial and Industrial Blueprint</td>
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SEMMESTER II

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<td>CISC 1470</td>
<td>Introduction to Computer Concepts and Applications</td>
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<td>OSHT 1313</td>
<td>Accident Prevention, Inspection and Investigation</td>
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<td>BMGT 1303</td>
<td>Principles of Management</td>
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Minimum Hours Required ........................................ 62-63

*MATH 1374 may be taken only when a science course is taken as well. Select natural science course from Astronomy, Biology, Chemistry, Earth Science, Ecology, Geology, Physical Science or Physics.

☐ These courses have been or will be revised effective, Fall 2000.

+Electives—must be selected from the following:

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<td>Art Appreciation</td>
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+Elective — must be selected from the following:

(continued on next page)
**GENERAL CONTRACTORS OPTION:**

- **CNBT 1342** Building Codes and Inspections ........................................3
- **CNBT 1392** Special Topics in Construction/Building Technology/Technician ........................................3
- **CNBT 1393** Special Topics in Construction/Building Technology/Technician ........................................3
- **CNBT 2332** Project Scheduling ........................................3
- **CNBT 2342** Construction Management I ........................................3
- **CNBT 2344** Construction Management II ........................................3
- **ENTC 1343** Statics ........................................3
- **ENTC 2333** Strength of Materials ........................................3
- **QCTC 1446** Testing and Inspection Systems ........................................4
- **SRVY 1301** Introduction to Surveying ........................................3
- **SRVY 1309** Surveying Measurement Practice ........................................3

**MECHANICAL, ELECTRICAL, PLUMBING CONTRACTOR OPTION:**

- **BMGT 1313** Principles of Purchasing ........................................3
- **CNBT 1342** Building Codes and Inspections ........................................3
- **CNBT 1346** Construction Estimating I ........................................3
- **CNBT 2332** Project Scheduling ........................................3
- **CNBT 2344** Construction Management II ........................................3
- **DFTG 2352** Mechanical and Electrical Systems ........................................3
- **ENTC 1343** Statics ........................................3
- **ENTC 2333** Strength of Materials ........................................3
- **SRVY 1301** Introduction to Surveying ........................................3

**NOTE:** Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
CONSTRUCTION TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CONSTRUCT.TECH

Students interested in a high demand career that is fast-paced with job opportunities—the Construction Industry is for you. The Construction Technology program is designed to develop the hands-on skills and technical knowledge necessary so that a graduate may advance in career paths appropriate to their own interests and abilities. Some of the exciting career options include: field engineer, estimator, building inspection, insurance and manufacturing representative, field supervisor, subcontractor, and builder in either commercial or residential construction/home building. A graduate will have also covered skills in other areas such as planning, and organization, problem solving and decision making, related communication, and business and human relations.

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<td>CNBT 1305</td>
<td>Residential and Light Commercial Blueprint Reading OR</td>
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<td>CNBT 1375</td>
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**GLAZING**

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<td>GLZG 2370</td>
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<td>GLZG 2371</td>
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**HVAC – COMMERCIAL OPTION**

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<td>HART 1376</td>
<td>A/C Control Principles</td>
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<td>Troubleshooting</td>
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**MASONRY – COMMERCIAL**

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**PIPEFITTING**

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<td>PFPB 2301</td>
<td>Pipe Fabrication and installation I</td>
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**PLUMBING - COMMERCIAL**

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<td>Pipe Fabrication and Installation I</td>
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<tr>
<td>PFPB 1371</td>
<td>Commercial Plumbing II</td>
<td>3</td>
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<td>PFPB 2343</td>
<td>Pipe Practices</td>
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<tr>
<td>PFPB 1345</td>
<td>Commercial Construction and Fixture Setting</td>
<td>3</td>
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<tr>
<td>PFPB 2370</td>
<td>Industrial Plumbing</td>
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<tr>
<td>PFPB 2347</td>
<td>Plumbing and Pipefitting Equipment and Safety</td>
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**RESIDENTIAL BUILDER/CONTRACTOR**

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<td>Residential and Light Commercial Blueprint Reading</td>
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<td>DFTG 2352</td>
<td>Mechanical and Electrical Systems</td>
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<tr>
<td>CRPT 1325</td>
<td>Forms and Foundations I</td>
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<tr>
<td>CRPT 1315</td>
<td>Conventional Wall Systems</td>
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<td>CNBT 1346</td>
<td>Construction Estimating I</td>
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<tr>
<td>RELE 1301</td>
<td>Principles of Real Estate</td>
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<td>BMGT 1301</td>
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<tr>
<td>BUSI 1301</td>
<td>Introduction to Business</td>
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CONSTRUCTION TECHNOLOGY

North Lake College

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CONSTRUCT.TECH

This is a one-year certificate that provides the student with the technical knowledge and hands-on skills required to work as a craftsperson in one of the following career fields: Carpentry, Electrical Field Engineering, Glazing, HVAC, Masonry, Pipefitting, Plumbing, Residential Builder, Sheet Metal Sprinkler Fitting, and Welding. In addition, the student will cover basic planning and materials estimating, problem solving, and human relations skills.

| CREDIT HOURS |
|---------------|----------------|
| SEMESTER I    |                |
| CNBT 1170     | Construction Safety .......... 1 |
| CNBT 1301     | Introduction to Construction .......... 3 |
| +Elective     | Certificate Craft Option .......... 6-12 |
|               | 10-16          |
| SEMESTER II   |                |
| CNBT 2380     | Cooperative Education -Construction/Building Technology/Technician .......... 3 |
| +Elective     | Certificate Craft Option .......... 6-12 |
|               | 9-15           |

Minimum Hours Required ........................................ 19-31

+Elective: only one option may be selected from the certificate craft options listed below. Students must complete all of the courses and/or electives listed in the one selected option to receive full credit toward a one year certificate.

Certificate Craft Options (SELECT ONLY ONE OPTION PER CERTIFICATE):
- Carpentry - Commercial
- Carpentry - Residential
- Electrical - Commercial
- Field Engineering
- Glazing
- HVAC - Commercial Option
- Masonry - Commercial
- Pipefitting
- Plumbing - Commercial
- Residential Builder/Contractor
- Sheet Metal
- Sprinkler Fitting
- Welding

+Electives must be selected from the following: Option and General Construction Technology courses.

**Carpentry - Commercial**
- CRPT 1329 Introduction to Carpentry .......... 3
- CRPT 1325 Forms and Foundations .......... 3
- CRPT 1349 Forms and Foundations II .......... 3
- CRPT 2343 Specialty Wall Systems .......... 3
- CRPT 2339 Specialty Exterior Finish Systems .......... 3
- CRPT 1345 Conventional Interior Finish Systems .......... 3
- CRPT 2341 Specialty Interior Finish Systems .......... 3
- **Electives** Construction Technology Elective .......... 3

**Carpentry - Residential**
- CRPT 1329 Introduction to Carpentry .......... 3
- CRPT 1325 Forms and Foundations .......... 3
- CRPT 1315 Conventional Wall Systems .......... 3
- CRPT 1311 Conventional Roof Systems .......... 3
- CRPT 1341 Conventional Exterior Finish Systems .......... 3
- CRPT 1345 Conventional Interior Finish Systems .......... 3
- **Electives** Construction Technology Elective .......... 6

**Electives for Carpentry - Commercial and Residential Options Only.**

**CONSTRUCTION TECHNOLOGY ELECTIVES**
- CNSE 1321 Job Site Layout and Development .......... 3
- CNBT 1342 Building Codes and Inspections .......... 3
- WDWK 1313 Cabinet Making .......... 3
- WDWK 2451 Cabinet Making II .......... 4
- ENTC 2333 Strength of Materials OR .......... 3
- ENTC 1343 Statics .......... (3)
- CRPT 2333 Advanced Roof Systems .......... 3
- CRPT 2347 Stairs .......... 3
- CRPT 1319 Engineered Roof Systems .......... 3
- CNBT 2342 Construction Management I .......... 3
- CNBT 2344 Construction Management II .......... 3
- CNBT 2346 Construction Management III .......... 3
- CNBT 2378 Estimating Commercial Electrical Construction .......... 3
- CNBT 2379 Estimating Commercial Electrical Construction .......... 3

**Electrical - Commercial**
- ELPT 1321 Introduction to Electrical Safety and Tools .......... 3
- ELPT 1311 Basic Electrical Theory .......... 3
- ELPT 1319 Fundamentals of Electricity .......... 3
- ELPT 1320 Fundamentals of Electricity II .......... 3
- ELPT 1345 Commercial Wiring .......... 3
- ELTN 1341 Basic Motor Controls .......... 3
- ELPT 1357 Industrial Wiring .......... 3
- ELTN 1343 Electrical Troubleshooting .......... 3

**24**

**FIELD ENGINEERING**
- SRVY 1315 Surveying Calculations I .......... 3
- SRVY 1301 Introduction to Surveying .......... 3
- CNBT 1375 Field Engineering I .......... 3
- SRVY 1309 Surveying Measurement Practice .......... 3
- SRVY 1313 Plane Surveying .......... 3
- CNBT 2375 Field Engineering II .......... 2

**18**
GLAZING
GLZG 1370 Glazing I ........................................... 3
GLZG 1371 Glazing II .......................................... 3
GLZG 1372 Glazing III ...................................... 3
GLZG 2370 Glazing IV .................................... 3
GLZG 2371 Glazing V .................................... 3
GLZG 2372 Glazing VI .................................... 3

HVAC - COMMERCIAL OPTION
HART 1374 Refrigeration Principles.......................... 3
ELPT 1319 Fundamentals of Electricity I .................. 3
CBFM 2317 Mechanical Maintenance ....................... 3
HART 1376 A/C Control Principles .......................... 3
HART 2376 Troubleshooting .................................. 3
HART 2377 Commercial Air Conditioning .................... 3
CBFM 2311 Building Maintenance II ....................... 3
HART 2378 Air Conditioning Systems Design ............. 3

MASONRY - COMMERCIAL
MBST 1407 Masonry I ....................................... 4
MBST 1409 Masonry II ..................................... 4
MBST 2407 Masonry III ..................................... 4
MBST 2409 Masonry IV ..................................... 4
MBST 2447 Masonry V ..................................... 4

PIPEFITTING
PFPB 1308 Introduction to Pipefitting ....................... 3
PFPB 2301 Pipe Fabrication and Installation I ............ 3
PFPB 2341 Pipe Fabrication and Installation II ........... 3
WLDG 1435 Introduction to Pipe Welding .................. 4
WLDG 1217 Introduction to Layout and Fabrication ...... 2
WLDG 2206 Intermediate Pipe Welding ...................... 2
PFPB 2343 Pipe Practices .................................. 3
PFPB 2347 Plumbing and Pipefitting Equipment and Safety 3

PLUMBING - COMMERCIAL
PFPB 1313 Introduction to the Plumbing Trade ............. 3
PFPB 2301 Pipe Fabrication and Installation I ............ 3
PFPB 1370 Commercial Plumbing I .......................... 3
PFPB 1371 Commercial Plumbing II .......................... 3
PFPB 2343 Pipe Practices .................................. 3
PFPB 1345 Commercial Construction and Fixture Setting .. 3
PFPB 2370 Industrial Plumbing ............................. 3
PFPB 2347 Plumbing and Pipefitting Equipment and Safety 3

RESIDENTIAL BUILDER/CONTRACTOR
ARCT 1302 Architectural Materials and Methods of Construction ........................................... 3
CNBT 1305 Residential and Light Commercial Blueprint Reading ............................................. 3
DFTG 2352 Mechanical and Electrical Systems ............. 3
CRPT 1325 Forms and Foundations I .......................... 3
CRPT 1315 Conventional Wall Systems ...................... 3
CNBT 1346 Construction Estimating I ......................... 3
RELE 1301 Principles of Real Estate ......................... 3
BMGT 1301 Supervision ..................................... 3
BUSI 1301 Introduction to Business ......................... 3

SHEET METAL
MCHN 1301 Sheet Metal I .................................... 3
MCHN 1349 Sheet Metal II ................................... 3
MCHN 1370 Sheet Metal IV .................................. 3
MCHN 1371 Sheet Metal V .................................. 3
MCHN 1372 Sheet Metal VI .................................. 3
MCHN 2370 Sheet Metal VII .................................. 3
MCHN 2371 Sheet Metal VIII .................................. 3
MCHN 2372 Sheet Metal IX .................................. 3

SPRINKLER FITTING
SPFT 1371 Sprinkler Fitter I .................................. 3
SPFT 1372 Sprinkler Fitter II .................................. 3
SPFT 1373 Sprinkler Fitter III .................................. 3
SPFT 1374 Sprinkler Fitter IV .................................. 3
SPFT 2370 Sprinkler Fitter V .................................. 3
SPFT 2371 Sprinkler Fitter VI .................................. 3
SPFT 2372 Sprinkler Fitter VII .................................. 3
SPFT 2373 Sprinkler Fitter VIII .................................. 3

WELDING
WLDG 1323 Welding Safety, Tools, and Equipment ........ 3
WLDG 1307 Basic Welding Processes ......................... 3
WLDG 1257 Intermediate Shielding Metal .................. 2
WLDG 1234 Introduction to Gas Tungsten Arc (GTAW) Welding ............................................. 2
WLDG 2213 Welding Using Multiple Processes .............. 2
WLDG 2214 Welding Using Multiple Processes .............. 2

*CNBT 2380 Cooperative Education - Construction/Building Technology/Technician may only be taken in SEMESTER II. Craft specific licensing exam may be substituted for CNBT 2380 Cooperative Education - Construction/Building Technology/Technician.
CRIMINAL JUSTICE

Cedar Valley, Eastfield, El Centro and Mountain View only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate).

Degree Plan Code: AAS.CRIMINAL.JUST

The curriculum is designed for those with Criminal Justice backgrounds as well as for recent high school graduates interested in preparing for employment in the fields of law enforcement, corrections, probations and paroles or private security.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>CRIJ 1310 Fundamentals of Criminal Law ..........3</td>
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<tr>
<td>CRIJ 1301 Introduction to Criminal Justice ..3</td>
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<tr>
<td>ENGL 1301 Composition I ..................................3</td>
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<tr>
<td>PSYC 2301 Introduction to Psychology ............3</td>
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<tr>
<td>MATH 1314 College Algebra OR ..........................3</td>
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<tr>
<td>MATH 1414 College Algebra ................................3</td>
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<tr>
<td>15-16</td>
</tr>
<tr>
<td>SEMESTER II</td>
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<tr>
<td>CRIJ 1306 Court Systems and Practices ..............3</td>
</tr>
<tr>
<td>CRIJ 1307 Crime in America ................................3</td>
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<tr>
<td>ENGL 1302 Composition II ................................3</td>
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<tr>
<td>SPCH 1311 Introduction to Speech Communication ..3</td>
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<tr>
<td>SOCI 1301 Introduction to Sociology ...............3</td>
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<tr>
<td>***Electives ..............................................6-8</td>
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<tr>
<td>SEMESTER IV</td>
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<tr>
<td>GOVT 2301 American Government .........................3</td>
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<tr>
<td>+Electives Humanities/Fine Arts .....................3</td>
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<tr>
<td>++Electives Required Support Courses ...............6-7</td>
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<tr>
<td>Elective Any Non-Criminal Justice Course ..........3</td>
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<td>15-16</td>
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<td>SEMESTER V</td>
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<tr>
<td>CISC 1470 Introduction to Computer Concepts and Applications .................4</td>
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<td>+++Electives Criminal Justice Elective ...........3-4</td>
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<td>PSYC 2314 Developmental Psychology OR  ...........</td>
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<td>SOCI 1306 Social Problems ................................3</td>
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<tr>
<td>++Electives Required Support Courses ...............3-4</td>
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</table>

Minimum Hours Required .....................................64-70

+Electives - must be selected from the following:

| ARTS 1301 Art Appreciation ................................3 |
| DRAM 1310 Introduction to the Theatre .................3 |
| ENGL 2000 Level Literature Course .....................3 |
| Foreign Language or American Sign Language ..........4 |
| HUMA 1301 Introduction to the Humanities ............3 |
| MUSI 1306 Music Appreciation ............................3 |
| PHIL 1301 Introduction to Philosophy ..................3 |

++ Required Support Courses - must be chosen from the following:

| CRIJ 2314 Criminal Investigation ............................3 |
| CRIJ 2323 Legal Aspects of Law Enforcement ................3 |
| CRIJ 2328 Police Systems and Practices ....................3 |
| CJSA 1382 Cooperative Education-Criminal Justice Studies ..3 |
| CJSA 1482 Cooperative Education-Criminal Justice Studies ..4 |
| CJSA 2382 Cooperative Education-Criminal Justice Studies ..3 |
| CJSA 2482 Cooperative Education-Criminal Justice Studies ..4 |

+++Criminal Justice Electives - must be chosen from the following:

| CRIJ 1313 Juvenile Justice System .........................3 |
| CRIJ 2313 Correctional Systems and Practices ............3 |
| CRIJ 2301 Community Resources in Corrections ..........3 |
| SPAN 1411 Beginning Spanish* ................................4 |
| SPAN 1412 Beginning Spanish* ................................4 |

*American Sign Language may not be substituted for this course.

The following courses are to be taken only after completing thirty semester hours of approved academic courses, to include fifteen hours of the transfer curriculum in Criminal Justice:

| CJLE 2420 Texas Peace Officer Procedures ..................4 |
| CJLE 2421 Texas Peace Officer Law ........................4 |
| CJLE 2522 Texas Peace Officer Skills .....................5 |

A student enrolling in the Criminal Justice program should meet the Texas Commission on Law Enforcement Officer Standards and Education Requirements for minimum standards if you plan to seek employment in the law enforcement field. Licensing: (a) not currently on probation for any criminal offense; (b) not convicted of a Class B misdemeanor in the last six (6) months, or a Class A misdemeanor in the last twelve (12) months, or DWI or DWD in the last two (2) years; (c) never been convicted of a felony.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Criminal Justice and provide the student advanced skills required by the industry to specialize in Human Services or Law Enforcement.

HUMAN SERVICES

Cedar Valley, Eastfield, El Centro and Mountain View only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.CRIJ.HUMAN.SERVICE

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<tr>
<td>SEMESTER I</td>
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<tr>
<td>SWAT 1372</td>
<td>Abnormal Behavior</td>
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<tr>
<td>SCAT 2373</td>
<td>Issues in Substance Abuse and Dependency</td>
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<tr>
<td>CJS 2382</td>
<td>Cooperative Education-Criminal Justice Studies</td>
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<tr>
<td>SOCI 2319</td>
<td>Race, Ethnicity and Community</td>
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<td>SOCI 2371</td>
<td>Urban Social Problems</td>
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Minimum Hours Required

15

LAW ENFORCEMENT

Cedar Valley, Eastfield, El Centro and Mountain View only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.CRIJ.LAW.ENFORCE

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<td>FIRT 1303</td>
<td>Fire and Arson Investigation</td>
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<td>SWAT 1372</td>
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<td>CJS 2382</td>
<td>Cooperative Education-Criminal Justice Studies</td>
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Minimum Hours Required

12

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.
**CRIMINAL JUSTICE**  
*Cedar Valley, Eastfield, El Centro and Mountain View only*

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.CRIJ.45

This certificate is attached to the Associate in Applied Sciences Degree in Criminal Justice and provides the student the skills and academic requirements necessary to qualify for a law enforcement agency with a minimum 45 semester-hour requirement.

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<td>ENGL 1301 Composition I ..........3</td>
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<td>CRIJ 1307 Crime in America ..........3</td>
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<td>CRIJ 2328 Police Systems and Practices ..........3</td>
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<td>SPCH 1311 Introduction to Speech Communication ..........3</td>
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<td>SOCI 1301 Introduction to Sociology ..........3</td>
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<td>GOVT 2301 American Government ..........3</td>
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Minimum Hours Required ..........45-46

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**CRIMINAL JUSTICE**  
*Cedar Valley, Eastfield, El Centro and Mountain View only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.CRIJ.30

This certificate is attached to the Associate in Applied Sciences Degree in Criminal Justice and provides the student the skills and academic requirements necessary to qualify for a law enforcement agency with a minimum 30 semester-hour requirement.

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<td>CRIJ 1301 Introduction to Criminal Justice ..........3</td>
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<td>ENGL 1301 Composition I ..........3</td>
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<tr>
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<td>SPCH 1311 Introduction to Speech Communication ..........3</td>
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<td>GOVT 2301 American Government ..........3</td>
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<th>CREDIT HOURS</th>
<th>SEMESTER III</th>
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<tr>
<td></td>
<td>CRIJ 2328 Police System and Practices ..........3</td>
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<tr>
<td></td>
<td>PSYC 2301 Introduction to Psychology ..........3</td>
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<tr>
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<td>SOCI 1301 Introduction to Sociology ..........3</td>
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Minimum Hours Required ..........30
CULINARY ARTS

El Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.CULINARY.ARTS

The Culinary Arts degree provides a learning environment for the skills necessary to perform in various culinary related positions.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>HAMG 1321 Introduction to Hospitality Industry</td>
<td>3</td>
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<tr>
<td>CULA 1301 Basic Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>CULA 1305 Sanitation and Safety</td>
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</tr>
<tr>
<td>CULA 1364 Practicum (or Field Experience) - Culinary Arts/Chef Training</td>
<td>3</td>
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<tr>
<td>TECM 1303 Technical Mathematics AND++</td>
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<tr>
<td>Natural Science OR</td>
<td>3-4</td>
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<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>PSTR 1301 Fundamentals of Baking</td>
<td>3</td>
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<tr>
<td>RSTO 1313 Hospitality Supervision</td>
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<tr>
<td>CULA 2331 Advanced Food Preparation</td>
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<tr>
<td>CULA 2364 Practicum (or Field Experience) - Culinary Arts/Chef Training</td>
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<tr>
<td>CULA 1409 Garde Manger</td>
<td>4</td>
</tr>
<tr>
<td>RSTO 1325 Purchasing for Hospitality Operations</td>
<td>3</td>
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<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
<td>3</td>
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<td><strong>Total</strong></td>
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<thead>
<tr>
<th>SEMESTER V</th>
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<tbody>
<tr>
<td>RSTO 1317 Nutrition for the Food Service Professional</td>
<td>3</td>
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<tr>
<td>RSTO 2301 Principles of Food and Beverage Controls</td>
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<tr>
<td><strong>Total</strong></td>
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Minimum Hours Required: 60-66

++Elective - must be selected from the following:

- ARTS 1301 Art Appreciation
- ENGL 2322 British Literature
- ENGL 2327 American Literature
- HUMA 1301 Introduction to Humanities
- MUSI 1306 Music Appreciation
- PHIL 1301 Introduction to Philosophy
- DRAM 1310 Introduction to Theatre

+++Students selecting TECM 1303 must also select one of the following Natural Science courses:

- BIOL 1408 Biological Science
- BIOL 1409 Biological Science
- ECOL 1305 People and Their Environment
- GEOL 1403 Physical Geology
- PHYS 1311 Descriptive Astronomy
- PHYS 1401 Introductory General Physics
- PHYS 1415 Physical Science

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
CULINARY ARTS--
BASIC CULINARY SKILLS

El Centro only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.FHSV.BASIC.CU1

This certificate prepares the student to function in a variety of food preparation positions in commercial and non-commercial kitchens.

<table>
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<table>
<thead>
<tr>
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<tr>
<td>PSTR 1301</td>
<td>Fundamentals of Baking............ 3</td>
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<tr>
<td>CULA 1301</td>
<td>Basic Food Preparation............ 3</td>
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<tbody>
<tr>
<td>CULA 2331</td>
<td>Advanced Food Preparation........ 3</td>
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<tr>
<td>CULA 1409</td>
<td>Garde Manager..................... 4</td>
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<tr>
<td>RSTO 1380</td>
<td>Cooperative Education - Food and Beverage/ Restaurant Operations Manager ...... 3</td>
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<tbody>
<tr>
<td>CULA 1305</td>
<td>Sanitation and Safety............... 3</td>
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<tr>
<td>RSTO 1313</td>
<td>Hospitality Supervision............... 3</td>
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</table>

Minimum Hours Required........................................ 22
# Diagnostic Medical Sonography

*El Centro only*

( Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

**Degree Plan Code:** AAS.DM.SONOGRAPHY

The Diagnostic Medical Sonography program prepares the student to function as a medical sonographer.

The diagnostic medical sonographer performs sonography examinations using high frequency sound waves to visualize soft tissue structures, including the gall bladder, kidneys, pregnant uterus and other organs as requested by the physician.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312-553-9355) and (JRC-DMS, 7108-C South Alton Way, Englewood, CO 80112-3533: Telephone number 303-741-3533) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point, interviews and recommendation letters, and completion of all requirements for admission as a full-time student to the college. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions to receive an information packet.

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<tr>
<td>PREREQUISITES:</td>
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<td>BIOL 2401 Anatomy and Physiology I OR</td>
</tr>
<tr>
<td>BIOL 1470 Introduction to Human Anatomy and Physiology</td>
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<tr>
<td>ENGL 1301 Composition I</td>
</tr>
<tr>
<td>MATH 1314 College Algebra</td>
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<tbody>
<tr>
<td><strong>I</strong></td>
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<tr>
<td>BIOL 2402 Anatomy and Physiology II OR</td>
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<td>BIOL 1472 Introduction to Human Anatomy and Physiology</td>
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<td>PSYC 2301 Introduction to Psychology</td>
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<tr>
<td>HPRS 1204 Basic Health Profession Skills</td>
<td>2</td>
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<tr>
<td>HPRS 1202 Wellness and Health Profession</td>
<td>2</td>
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<td>HPRS 2231 General Health Professions Management</td>
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<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
<td>3</td>
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<tr>
<td>+Elective Humanities/Fine Arts</td>
<td>3</td>
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<tr>
<td>HPRS 1291 Special Topics in Health Professions and Related Sciences, Other</td>
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<tr>
<td>HPRS 2300 Pharmacology for Health Professions</td>
<td>3</td>
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<tr>
<td>HPRS 2201 Pathophysiology</td>
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<tbody>
<tr>
<td>DMSO 1351 Sonographic Cross Sectional Anatomy</td>
<td>3</td>
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<tr>
<td>DMSO 2343 Advanced Acoustical Physics</td>
<td>3</td>
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<tr>
<td>DMSO 1366 Practicum (or Field Experience) - Diagnostic Medical Sonography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>DMSO 1405 Sonography I</td>
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<tr>
<td>DMSO 2101 Ultrasound Instrumentation</td>
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<tr>
<td>DMSO 2405 Sonography II</td>
<td>4</td>
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<tr>
<td>DMSO 2366 Practicum (or Field Experience) - Diagnostic Medical Sonography</td>
<td>3</td>
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<tr>
<td>DMSO 1355 Pathophysiology</td>
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<td>DMSO 1191 Special Topics in Diagnostic Medical Sonography</td>
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<tr>
<td>DMSO 2262 Clinical - Diagnostic Medical Sonography</td>
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<tbody>
<tr>
<td>DMSO 1192 Special Topics in Diagnostic Medical Sonography</td>
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<tr>
<td>DMSO 2263 Clinical - Diagnostic Medical Sonography</td>
<td>2</td>
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<td><strong>Total</strong></td>
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<tr>
<td>DMSO 2345 Advanced Sonography Practices</td>
<td>3</td>
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<tr>
<td>DMSO 2367 Practicum (or Field Experience) - Diagnostic Medical Sonography</td>
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Minimum Hours Required: 72

+Elective - may be selected from the following:

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<tr>
<td>ARTS 1301 Art Appreciation</td>
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<tr>
<td>DRAM 1310 Introduction to the Theater</td>
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<tr>
<td>HUMA 1301 Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 1306 Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1301 Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 2000-level Literature course</td>
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</table>

Note: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
DIAGNOSTIC MEDICAL SONOGRAPHY

El Centro only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.AHIC.SONOGRAPHY

The Diagnostic Medical Sonography Certificate Option is for students having at least a previous Associate Degree in a designated allied health field or a B.S. degree with a major in a science discipline. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology, math and physics. Upon completion, a certificate will be awarded.

The diagnostic medical sonographer performs sonography examinations using high-frequency sound waves to visualize soft tissue structures including the gall bladder, kidneys, pregnant uterus, and other organs as requested by the physician.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312-553-9355) in cooperation with the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS, 7108-C South Alton Way, Englewood, CO 80112-3533: Telephone number 303-741-3533).

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point, interviews and recommendation letters, and completion of all requirements for admission as a full-time student to the college. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions to receive an information packet.

PREREQUISITES:
Certificate applicants must have two of the three common learning courses prior to acceptance into the program. These courses include:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
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SEMESTER I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>DMSO 1351</td>
<td>Sonographic Cross Sectional Anatomy</td>
<td>3</td>
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<tr>
<td>DMSO 2343</td>
<td>Advanced Acoustical Physics</td>
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<tr>
<td>DMSO 1366</td>
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</tr>
<tr>
<td>DMSO 1405</td>
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SEMESTER II

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>DMSO 2101</td>
<td>Ultrasound Instrumentation</td>
<td>1</td>
</tr>
<tr>
<td>DMSO 2405</td>
<td>Sonography II</td>
<td>4</td>
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<tr>
<td>DMSO 2366</td>
<td>Practicum (or Field Experience) - Diagnostic Medical Sonography</td>
<td>3</td>
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<tr>
<td>DMSO 1355</td>
<td>Pathophysiology</td>
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SEMESTER III

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DMSO 1191</td>
<td>Special Topics in Diagnostic Medical Sonography</td>
<td>1</td>
</tr>
<tr>
<td>DMSO 2262</td>
<td>Clinical - Diagnostic Medical Sonography</td>
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SEMESTER IV

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<th>Course Title</th>
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<tbody>
<tr>
<td>DMSO 1192</td>
<td>Special Topics in Diagnostic Medical Sonography</td>
<td>1</td>
</tr>
<tr>
<td>DMSO 2263</td>
<td>Clinical - Diagnostic Medical Sonography</td>
<td>2</td>
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SEMESTER V

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DMSO 2345</td>
<td>Advanced Sonography Practices</td>
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</tr>
<tr>
<td>DMSO 2367</td>
<td>Practicum (or Field Experience) - Diagnostic Medical Sonography</td>
<td>3</td>
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Minimum Hours Required.................................42
DIGITAL IMAGING TECHNOLOGY

*Eastfield only*

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.DIGITAL.IMAG.TEC

This program focuses on the application of computer technology in the area of digital publishing, preparing the student for employment in the areas of commercial printing, electronic pre-press, multimedia publishing, desktop publishing, or graphic design. A strong background in traditional skills is stressed and strengthened with training in contemporary software and business management techniques. Advanced students work in an in-house service bureau, serve as professional interns, or participate in a cooperative work program to gain practical job experience preparing them for full-time employment.

### CREDIT HOURS

#### SEMESTER I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>GRPH 1305</td>
<td>Introduction to Graphic Arts and Printing</td>
<td>3</td>
</tr>
<tr>
<td>GRPH 1309</td>
<td>Press Operations I</td>
<td>3</td>
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<tr>
<td>GRPH 1395</td>
<td>Special Topics in Typography and Composition</td>
<td>3</td>
</tr>
<tr>
<td>GRPH 1322</td>
<td>Electronic Publishing I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
<td>4</td>
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#### SEMESTER II

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<tbody>
<tr>
<td>+GRPH 1325</td>
<td>Digital Imaging I</td>
<td>3</td>
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<tr>
<td>GRPH 1354</td>
<td>Electronic Publishing II</td>
<td>3</td>
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<tr>
<td>ARTS 1311</td>
<td>2D Design</td>
<td>3</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>++ Elective</td>
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<tr>
<td>GRPH 1357</td>
<td>Digital Imaging II</td>
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<tr>
<td>GRPH 1359</td>
<td>Object-Oriented Computer Graphics</td>
<td>3</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>Introduction to Psychology</td>
<td>3</td>
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<tr>
<td>++ Elective</td>
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Minimum Hours Required: 61-64

+GRPH 1223 Digital Imaging I and GRPH 1224 Digital Imaging I may be substituted for GRPH 1325 Digital Imaging I.

++Elective - Student must select from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>ARTS 1312</td>
<td>3D Design</td>
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<tr>
<td>ARTS 1316</td>
<td>Drawing I</td>
<td>3</td>
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<tr>
<td>ARTS 1317</td>
<td>Drawing II</td>
<td>3</td>
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<tr>
<td>ARTS 2316</td>
<td>Painting I</td>
<td>3</td>
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<tr>
<td>ENGL 1302</td>
<td>Composition II</td>
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<tr>
<td>ENGL 2311</td>
<td>Technical Writing</td>
<td>3</td>
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<tr>
<td>(Prerequisites: ENGL 1301 and ENGL 1302)</td>
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<tr>
<td>PHOT 1316</td>
<td>Introduction to Photography and Photojournalism</td>
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<tr>
<td>PHOT 1317</td>
<td>Advanced Photography and Photojournalism</td>
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<td>PHOT 2370</td>
<td>Photography for Publications</td>
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<tr>
<td>++ Elective</td>
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Some Computer Information Technology courses (see GRPH Program Director)

Any Electronics course                                    | 3-4          |
Any Graphic Arts (Digital Imaging Technology) course       | 3-4          |
Any Journalism course                                      | 3-4          |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
DIGITAL IMAGING TECHNOLOGY -- ELECTRONIC PRE-PRESS

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.DIGITAL.PRESS

This program provides students with entry level digital imaging production skills. Students use state of the art computer software and hardware to professionally design images for print and electronic publication.

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<tbody>
<tr>
<td>GRPH 1305</td>
<td>Introduction to Graphic Arts and Printing 3</td>
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<td>Electronic Publishing I 3</td>
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<td>GRPH 2341</td>
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<tr>
<td>GRPH 2336</td>
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Minimum Hours Required 29

+ Electives must be selected from the following:

| GRPH 1391  | Special Topics in Graphic and Printing Equipment Operator - Web Graphic Design 3 |
| GRPH 1395  | Special Topics in Graphic and Printing Equipment Operator - Typography 3 |
| GRPH 2382  | Cooperative Work Experience 3 |

DIGITAL IMAGING TECHNOLOGY -- DIGITAL PHOTOGRAPHY

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.DIGITAL.PHOTO

### SEMESTER I

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<tr>
<td>GRPH 1305 Introduction to Graphic Arts and Printing</td>
</tr>
<tr>
<td>GRPH 1325 Digital Imaging I</td>
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<tr>
<td>PHTC 1349 Photo Digital Imaging I</td>
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<tr>
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### SEMESTER II

<table>
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<tbody>
<tr>
<td>PHTC 2349 Photo Digital Imaging II OR</td>
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<tr>
<td>GRPH 2381 Cooperative Education - Graphic and Printing Equipment Operator (3)</td>
</tr>
<tr>
<td>++ Elective</td>
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<tr>
<td>GRPH 1357 Digital Imaging II</td>
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<tr>
<td>IMED 2311 Portfolio Development</td>
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</table>

Minimum Hours Required 24

+ Elective must be selected from the following:

| BUSI 1301 Introduction to Business |
| POFT 1321 Business Math |
| MRKG 1311 Principles of Marketing |
| GRPH 1322 Electronic Publishing I |
| GRPH 2381 Cooperative Education - Graphic and Printing Equipment Operator |
| ARTS 1311 2D Design |

++ Elective must be selected from the following:

| ENGL 1301 Composition I |
| MATH 1314 College Algebra |
| MATH 1332 College Mathematics I |
| MATH 1342 Introductory Statistics |
| TECM 1341 Technical Algebra with a Natural Science elective |
| MATH 1414 College Algebra OR |
| SPCH 1311 Introduction to Speech Communication |

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ECHOCARDIOLOGY TECHNOLOGY

El Centro only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.ECHOCARDIOLOGY

The Echocardiology Technology program is a two-year program that prepares students to function as an Echocardiographer. The first year of the program consists of general education and health occupations core courses.

The second year of the program provides intensive didactic and clinical training in the medical specialty of Echocardiology.

The Echocardiography technologist performs cardiovascular examinations to produce a picture of a heart and great vessels using high-frequency sound waves. These examinations are used to diagnose congenital heart disease, valvular disease, pericardial disease, cardiomyopathy, and other cardiovascular disorders. Types of examinations include 2D and 3D Echo, M-mode and color flow Doppler, as well as Transesophageal and Stress Studies. The Echocardiographer may work in hospitals, clinics and physicians offices.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point of 2.85 or higher, completion of all requirements for admissions as a full-time student to the college. Applicants are rank-ordered for admission based on grade point earned on prerequisite courses, interviews and recommendation letters. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions to receive an information packet.

CREDIT HOURS

SEMMSTER I

HPRS 1204 Basic Health Profession Skills ............. 2
HPRS 1202 Wellness and Health Promotion ............. 2
HPRS 2231 General Health Professions Management ............. 2
ENGL 1301 Composition .................................. 3
MATH 1314 College Algebra OR .......................... 3
MATH 1414 College Algebra .............................. 4
BIOL 1470 Introduction to Human Anatomy and Physiology I OR
BIOL 2401 Anatomy and Physiology I ............. 4
+Elective .................................................. 3
19-20

SEMMTER II

HPRS 2300 Pharmacology for Health Professions ....................... 3
HPRS 1291 Special Topics in Health Professions and Related Sciences, Other ............. 2
HPRS 2201 Pathophysiology .................................. 2
BIOL 1472 Introduction to Human Anatomy and Physiology II OR ............. 4
BIOL 2402 Anatomy and Physiology II ............. (4)
PSYC 2301 Introduction to Psychology ..................... 3
SPCH 1311 Introduction to Speech Communication ..................... 3
17

SEMMTER III

DCMS 1304 Cardiovascular Physiology ..................... 3
DCMS 1313 Echocardiography Lab Fundamentals I ............. 3
DCMS 1214 Introduction to the Echocardiography Lab ..................... 2
DCMS 1260 Clinical - Echocardiography Technology ..................... 2
10

SEMMTER IV

DCMS 2410 Echocardiography I ..................... 4
DCMS 2660 Clinical - Echocardiography Technology ..................... 6
DCMS 1291 Special Topics in Echocardiography Technology ..................... 2
12

SEMMTER V

DCMS 2450 Echocardiography II ..................... 4
DCMS 2661 Clinical - Echocardiography Technology ..................... 6
DCMS 2240 Noninvasive Vascular Echocardiography ..................... 2
12

Minimum Hours Required ..................... 70-71

+Elective - may be selected from the following:

ARTS 1301 Art Appreciation ..................... 3
DRAM 1310 Introduction to the Theater ..................... 3
HUMA 1301 Introduction to Humanities ..................... 3
MUSI 1306 Music Appreciation ..................... 3
PHIL 1301 Introduction to Philosophy ..................... 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ECHOCARDIOLOGYTECHNOLOGY

El Centro only

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements)

Degree Plan Code: CERT.AHIC.ECHOCARD

The Echocardiology Technology Certificate Option is for a student having at least a previous Associate Degree in a designated allied health field or a B.S. degree with a major in a science discipline. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology and math and physics. A background in basic ECGs and pharmacology is also required. Upon completion, a certificate will be awarded.

The Echocardiology technologist performs cardiovascular examinations to produce a picture of a heart and great vessels using high-frequency sound waves. These examinations are used to diagnose congenital heart disease, valvular disease, pericardial disease, cardiomyopathy, and other cardiovascular disorders. Types of examinations include 2D and 3D Echo, M-mode and color flow Doppler, as well as Transesophageal and Stress Studies. The Echocardio-grapher may work in hospitals, clinics and physicians offices.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point of 2.85 or higher, completion of all requirements for admissions as a full-time student to the college. Applicants are rank-ordered for admission based on grade point earned on prerequisite courses, interviews and recommendation letters. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions to receive an information packet.

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<th>PREREQUISITES</th>
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<tr>
<td>SPCH 1311 Introduction to Communication 3</td>
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<tr>
<td>ENGL 1301 Composition I 3</td>
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<tr>
<td>MATH 1314 College Algebra OR 3</td>
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<tr>
<td>MATH 1414 College Algebra (4)</td>
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<table>
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<tbody>
<tr>
<td>DCMS 1304 Cardiovascular Physiology 3</td>
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<tr>
<td>DCMS 1313 Echocardiology Lab Fundamentals I...3</td>
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<tr>
<td>DCMS 1214 Introduction to the Echocardiology Lab 2</td>
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<tr>
<td>DCMS 1260 Clinical – Echocardiology Technology 2</td>
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<tr>
<td>DCMS 2410 Echocardiology I 4</td>
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<tr>
<td>DCMS 2660 Clinical – Echocardiology Technology 6</td>
</tr>
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<td>DCMS 1291 Special Topics in Echocardiology Technology 2</td>
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<tbody>
<tr>
<td>DCMS 2450 Echocardiology II 4</td>
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<tr>
<td>DCMS 2661 Clinical – Echocardiology Technology 6</td>
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<tr>
<td>DCMS 2240 Noninvasive Vascular Echocardiology 2</td>
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Minimum Hours Required 43-44
EDUCATIONAL PERSONNEL

Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ED.PERSONNEL

This program is designed to prepare educational personnel in a wide range of competencies needed for effective roles in public and nonpublic schools. A student can take courses required for the one year Educational Assistant Certificate and continue in the program to receive the two-year Associate in Applied Sciences Degree.

Educational personnel are employed under job titles such as teacher aide, assistant teacher, library assistant, P.E. aide, study hall teacher, tutor, tutoring coordinator, youth worker, special education aides, etc. Individuals working with handicapped children have found this program to be especially beneficial.

The program offered at El Centro College is under the administration of Richland College. Students apply for admission and attend classes at El Centro but receive their degrees from Richland.

Ask about special articulation agreements that utilize this program as the first two years of area University Teacher Education Programs.

<table>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>EDTC 1307 Teaching Reading in the Elementary School .......... 3</td>
</tr>
<tr>
<td>EDTC 1301 Instructional Practices: Educational Processes .......... 3</td>
</tr>
<tr>
<td>ENGL 1301 Composition I .......... 3</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication .......... 3</td>
</tr>
<tr>
<td>HIST 1301 History of the United States .......... 3</td>
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</table>

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| SEMESTER II |
| EDTC 1325 Principles and Practices of Multicultural Education .......... 3 |
| EDTC 1341 Computer Instruction for Educators OR .......... 3 |
| ITSC 1401 Introduction to Computers .......... (4) |

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<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER III</td>
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<tr>
<td>CDEC 1359 Children with Special Needs .......... 3</td>
</tr>
<tr>
<td>EDTC 1364 Practicum (or field Experience) Teacher Assistant/Aide OR .......... 3</td>
</tr>
<tr>
<td>EDTC 1164 Practicum (or field Experience) Teacher Assistant/Aide (1)</td>
</tr>
<tr>
<td>GOVT 2301 American Government .......... 3</td>
</tr>
<tr>
<td>+Elective Humanities/Fine Arts .......... 3</td>
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<tr>
<td>+++Elective Lab Science .......... 4</td>
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14-16

<table>
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<tbody>
<tr>
<td>SEMESTER IV</td>
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<tr>
<td>GOVT 2302 American Government .......... 3</td>
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<tr>
<td>MATH 1314 College Algebra OR .......... 3</td>
</tr>
<tr>
<td>MATH 1414 College Algebra (4)</td>
</tr>
<tr>
<td>ENGL Any 2000 level English Literature .......... 3</td>
</tr>
<tr>
<td>+++Elective Lab Science .......... 4</td>
</tr>
<tr>
<td>Elective Any Non-EDTC Course .......... 3</td>
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16-17

<table>
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<th>Minimum Hours Required: 60-64</th>
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<tbody>
<tr>
<td>+Elective -- must be selected from the following:</td>
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<tr>
<td>PSYC 2301 Introduction to Psychology .......... 3</td>
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<tr>
<td>PSYC 2314 Developmental Psychology .......... 3</td>
</tr>
<tr>
<td>SOCI 1306 Social Problems .......... 3</td>
</tr>
<tr>
<td>SOCI 2319 Race, Ethnicity and Community .......... 3</td>
</tr>
<tr>
<td>++Elective -- must be selected from the following:</td>
</tr>
<tr>
<td>ARTS 1301 Art Appreciation .......... 3</td>
</tr>
<tr>
<td>MUSI 1306 Music Appreciation .......... 3</td>
</tr>
</tbody>
</table>

| +++ Elective must be selected from the following: |
| BIOL 1406 Biological Science .......... 4 |
| BIOL 1409 Biological Science .......... 4 |
| PHYS 1415 Physical Science .......... 4 |
| PHYS 1417 Physical Science .......... 4 |
| GEOL 1403 Physical Geology .......... 4 |
| GEOL 1404 Historical Geology .......... 4 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
EDUCATIONAL PERSONNEL--
BILINGUAL/ESL OPTION

Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ED.PERSONNEL.BIL

The Bilingual/ESL Option in the Educational Personnel Program is designed to prepare the student to assist in the instructional development of children who have a limited English proficiency.

The Associate in Applied Sciences Degree is awarded for successful completion of at least 64 credit hours as outlined.

Ask about special articulation agreements that utilize this program as the first two years of area University Teacher Education Programs.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTC 1301 Instructional Practices: Educational Processes</td>
</tr>
<tr>
<td>EDTC 1325 Principles and Practices Multicultural Education</td>
</tr>
<tr>
<td>ENGL 1301 Composition I</td>
</tr>
<tr>
<td>HIST 1301 History of the United States</td>
</tr>
<tr>
<td>SPAN 1411 Beginning Spanish</td>
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<tr>
<td><strong>Total</strong></td>
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</table>

<table>
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<tr>
<th>SEMESTER II</th>
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<tbody>
<tr>
<td>EDTC 1307 Teaching Reading in the Elementary School</td>
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<tr>
<td>ENGL 1302 Composition II</td>
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<tr>
<td>HIST 1302 History of the United States</td>
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<tr>
<td>MATH 1314 College Algebra OR</td>
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<tr>
<td>MATH 1414 College Algebra</td>
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<tr>
<td>SPAN 1412 Beginning Spanish</td>
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<th>SEMESTER III</th>
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<tbody>
<tr>
<td>EDTC 1321 Bilingual Education</td>
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<tr>
<td>EDTC 1341 Computer Instruction for Educators OR</td>
</tr>
<tr>
<td>ITSC 1401 Introduction to Computers</td>
</tr>
<tr>
<td>PSYC 2301 Introduction to Psychology</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
</tr>
<tr>
<td>+Elective Humanities/Fine Arts</td>
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<tr>
<td>GOVT 2301 American Government</td>
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<tr>
<td>EDTC 1391 Special Topics in English Teacher Education</td>
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<td>CDEC 1359 Children with Special Needs</td>
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<tr>
<td>EDTC 1364 Practicum (or Field Experience) - Teacher Assistant/Aide OR</td>
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<tr>
<td>EDTC 1164 Practicum (or Field Experience) - Teacher Assistant/Aide</td>
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<tr>
<td>GOVT 2302 American Government</td>
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<tr>
<td>++Elective Lab Science</td>
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</table>

Minimum Hours Required: 64-68

+Elective - must be selected from the following:

| ARTS 1301 Art Appreciation | 3 |
| MUSI 1306 Music Appreciation | 3 |

++Elective - must be selected from the following:

| BIOL 1408 Biological Science | 4 |
| BIOL 1409 Biological Science | 4 |
| PHYS 1415 Physical Science | 4 |
| PHYS 1417 Physical Science | 4 |
| GEOL 1403 Physical Geology | 4 |
| GEOL 1404 Historical Geology | 4 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
EDUCATIONAL PERSONNEL --
EDUCATIONAL ASSISTANT

Richland only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.EDUC.ASSISTANT

This Educational Assistant certificate program provides the student with the basic knowledge and skills to work effectively in public schools as an educational aide or teacher assistant. All courses taken in this certificate program will apply to the Associate in Applied Sciences Degree program in Educational Personnel as well as to the Bilingual/ESL Option.

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<tr>
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<td>EDTC 1307 Teaching Reading in the Elementary School.......................... 3</td>
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<tr>
<td>EDTC 1325 Principles and Practices of Multicultural Education.............. 3</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication................................ 3</td>
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<tr>
<td>+Elective .................................................................................. 3</td>
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<td>+Elective .................................................................................. 3</td>
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<td>........................................................... 15</td>
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<tr>
<td>SEMESTER II</td>
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<tr>
<td>EDTC 1301 Instructional Practices: Educational Processes....................... 3</td>
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<td>EDTC 1359 Children with Special Needs............................................. 3</td>
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<tr>
<td>ENGL 1301 Composition I .............................................................. 3</td>
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<tr>
<td>+Elective .................................................................................. 3</td>
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<td>........................................................... 12</td>
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Minimum Hours Required ........................................................................ 27

+Elective - must be selected from the following:

| ARTS 1301 | Computer Appreciation .................................................... 3 |
| EDTC 1341 | Program for Educators ..................................................... 3 |
| EDTC 1194 | Special Topics in Teacher Assistant/Aide .......................... 1 |
| EDTC 1294 | Special Topics in Teacher Assistant/Aide .......................... 2 |
| EDTC 1394 | Special Topics in Teacher Assistant/Aide .......................... 3 |
| EDTC 1164 | Practicum (or Field Experience) - .................................... 1 |
| EDTC 1165 | Special Topics in Teacher Assistant/Aide .......................... 1 |
| EDTC 1321 | Bilingual Education .......................................................... 3 |
| EDTC 1364 | Practicum (or Field Experience) - .................................... 3 |
| EDTC 1365 | Practicum (or Field Experience) - .................................... 3 |
| EDTC 1391 | Special Topics in English Teacher Education ....................... 3 |
| ENGL 1302 | Composition II ................................................................. 3 |
| ENGL 1301 | (2000 Level Literature Course) ........................................... 3 |
| IMED 1301 | Introduction to Multimedia ................................................ 3 |
| HDEV 1370 | Educational and Career Planning ....................................... 3 |
| MATH 1335 | Fundamental Concept of Mathematics for Elementary Teachers OR |
| MUSI 1306 | College Mathematics Elective ............................................ 3-4 |
| PHED 1306 | Advanced First Aide and Emergency Care ............................ 3 |
| POFI 1345 | Integrated Software Applications II ................................... 3 |
| PSYC 2301 | Introduction to Psychology ................................................ 3 |
| PSYC 2314 | Developmental Psychology .................................................. 3 |
| SOCI 1301 | Introduction to Sociology .................................................. 3 |
| SOCI 1306 | Social Problems ................................................................. 3 |
| SOCI 2319 | Race, Ethnicity and Community ......................................... 3 |

Students may ONLY take one (1) Special Topics course for this certificate.
The Electrical Technology program prepares the student for career opportunities by developing technical knowledge and practical skills necessary to enter or advance in the electrical technology field.

Students wishing to earn an Associate in Applied Sciences Degree with a major in Electrical Technology must complete all of the courses listed below.

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<td>ELPT 1215</td>
<td>Electrical Calculations I AND .......... 2</td>
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<tr>
<td>ECOL 1305</td>
<td>People and Their Environment OR</td>
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<td>MATH 1314</td>
<td>College Algebra .................................. 3</td>
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<tr>
<td>ELPT 1411</td>
<td>Basic Electrical Theory .................... 4</td>
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<tr>
<td>ELPT 1221</td>
<td>Introduction to Electrical Safety and Tools .................................. 2</td>
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<tr>
<td>IEIR 1412</td>
<td>Distribution Systems .......................... 4</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication .................. 3</td>
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<td>EEIR 1307</td>
<td>Introductory Security Systems .......... 3</td>
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<tr>
<td>ELPT 1329</td>
<td>Residential Wiring ......................... 3</td>
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<td>ELPT 1349</td>
<td>Electrical Blueprint Reading ........... 3</td>
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<tr>
<td>ELPT 1325</td>
<td>National Electrical Code I .............. 3</td>
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<td>ELTN 1380</td>
<td>Cooperative Education - Electrician ... 3</td>
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<td>ELPT 1351</td>
<td>Electrical Machines ........................ 3</td>
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<td>ELPT 1357</td>
<td>Industrial Wiring .......................... 3</td>
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<tr>
<td>ELPT 2443</td>
<td>Electrical Systems Design ................. 4</td>
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<td>HUMA 1301</td>
<td>Introduction to Humanities OR</td>
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<tr>
<td>MUSI 1304</td>
<td>Music Appreciation OR</td>
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<td>ARTS 1301</td>
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<td>Solid State Devices ....................... 4</td>
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<td>ELPT 1441</td>
<td>Motor Control .................................. 4</td>
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<tr>
<td>ELPT 2437</td>
<td>Electrical Planning and Estimating ....... 4</td>
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<tr>
<td>ELTN 1381</td>
<td>Cooperative Education – Electrician .... 3</td>
</tr>
<tr>
<td>PSYC 2302</td>
<td>Applied Psychology OR</td>
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<tr>
<td>HDEV 2315</td>
<td>Principles and Processes of Personal and Social Adjustment .......... 3</td>
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Minimum Hours Required........................................ 68-70

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ELECTRICAL TECHNOLOGY

North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ELEC.TECH

Completion of all courses listed below qualifies a student for a Certificate in Electrical Technology. The courses may be taken in any order after consultation with the instructor.

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<th>CREDIT HOURS</th>
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<td>ENGL 1301</td>
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<td>.................. 18</td>
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</table>

Minimum Hours Required ........................................ 34-36
ELECTRICAL TECHNOLOGY--ELECTRICAL CONSTRUCTION

North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ELECT.CONSTRUCT

In partnership with the Dallas Electrical Joint Apprenticeship and Training Committee, this program will prepare students for employment as a Journeyman Electrician. Successful completion of all phases of the curriculum and the on-the-job training prepares the student for numerous career opportunities in the field of Electrical Construction. In addition to providing the specified technical skills and knowledge required to be successful in the industry, this program also covers skills in other related areas such as organization and planning, supervision, and problem-solving and decision-making.

Electrical Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td></td>
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<td>SPCH 1311</td>
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</tr>
<tr>
<td>ELPT 2271</td>
</tr>
<tr>
<td>Elective</td>
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Minimum Hours Required ........................................... 60-61

+Students selecting TECM 1341 must also complete a Natural Science course. This course must be selected from the following:

| CREDIT HOURS | BIOL 1406 General Biology ..................... 4 |
|--------------| BIOL 1408 Biological Science ..................... 4 |
|              | CHEM 1411 General Chemistry ..................... 4 |
|              | GEOL 1403 Physical Geology ..................... 4 |
|              | PHYS 1311 Descriptive Astronomy with ........ 3 |
|              | PHYS 1111 Astronomy Laboratory I .............. 1 |
|              | PHYS 1312 General Astronomy with ............. 3 |
|              | PHYS 1112 Astronomy Laboratory II .............. 1 |
|              | PHYS 1415 Physical Science ..................... 4 |
|              | PHYS 1417 Physical Science ..................... 4 |
|              | PHYS 1401 Introductory General Physics .......... 4 |
|              | PHYS 1405 Concepts in Physics ................... 4 |
|              | PHYS 1407 Concepts in Physics ................... 4 |
|              | PHYS 1470□ Applied Physics ..................... 4 |
|              | PHYS 1471□ Applied Physics ..................... 4 |
|              | ++ Humanities/Fine Arts course: This includes any course with the title of Humanities, Art, Music, Philosophy, Dance, Drama, Religion, Foreign Language. |
|              | +++ Social/Behavioral Science course: This includes any course with the title of Anthropology, Government, History, Human Development, Psychology, or Sociology. |
|              | □ These courses have been or will be revised effective, Fall 2000. |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ELECTRICAL TECHNOLOGY--
ELECTRICAL CONSTRUCTION

North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ELECT.CONST

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<td>Electrical Theory I</td>
<td>2</td>
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<td>Electrical Job Information I</td>
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<td>ELTN 1273</td>
<td>Electrical Theory II</td>
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<td>ELTN 1274</td>
<td>Electrical Job Information II</td>
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<td>ELTN 1278</td>
<td>Electrical Job Information IV</td>
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<td>ELTN 2270</td>
<td>Electrical Theory V</td>
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<tr>
<td>ELTN 2271</td>
<td>Electrical Job Information V</td>
<td>2</td>
</tr>
<tr>
<td>ELTN 2272</td>
<td>Electrical Theory VI</td>
<td>2</td>
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<td>ELTN 2273</td>
<td>Electrical Job Information VI</td>
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<td>ELTN 2274</td>
<td>Electrical Theory VII</td>
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<td>Electrical Theory IX</td>
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<td>ELTN 2279</td>
<td>Electrical Job Information IX</td>
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<td>ELPT 2270</td>
<td>Electrical Theory X</td>
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<td>ELPT 2271</td>
<td>Electrical Job Information X</td>
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Minimum Hours Required .................................................. 42
ELECTRONIC TELECOMMUNICATIONS

Eastfield only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.ELECTRONIC.TELEC

This program is designed to prepare students to work as hardware technicians in the field of telecommunications. The student will be trained to test, interface, troubleshoot, and repair equipment for the telecommunications industry. The student will learn schematic interpretation, test equipment usage, and technical communications.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>CETT 1403 DC Circuits ................................................. 4</td>
</tr>
<tr>
<td>CETT 1425 Digital Fundamentals ........................................... 4</td>
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<tr>
<td>ENGL 1301 Composition I .................................................. 3</td>
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<tr>
<td>+Elective Mathematics OR ............................................... 3</td>
</tr>
<tr>
<td>MATH 1374[1] Technical Mathematics I AND ................................ (3)</td>
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<tr>
<td>+ +Elective Natural Science .............................................. (4)</td>
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| SEMESTER II   |
| CETT 1405 AC Circuits ...................................................... 4 |
| CETT 1429 Solid State Devices ............................................ 4 |
| EECT 1401 Introduction to Telecommunications ......................... 4 |
| SPCH 1311 Introduction to Speech Communication ...................... 3 |
| +++Elective Social/Behavioral Science ................................... 3 |
| 18                     |

| SEMESTER III |
| CETT 1441 Solid State Circuits ........................................... 4 |
| CETT 1457 Linear Integrated Circuits ..................................... 4 |
| EECT 2430 Telecommunications Switching .................................. 4 |
| EECT 2439 Communication Circuits .......................................... 4 |
| 16                     |

| SEMESTER IV |
| CPMT 1449 Computer Networking Technology ............................... 4 |
| ++++Elective Telecommunication Elective ................................ 4 |
| ++++Elective Telecommunication Elective ................................ 4 |
| +++++Elective Humanities/Fine Arts Elective ............................ 3 |
| 15                     |

Minimum Hours Required .................................................. 63-67

+College level MATH course should be chosen from the following:
- MATH 1332 College Mathematics I ........................................... 3
- MATH 1342 Introductory Statistics ......................................... 3
- MATH 1314 College Algebra OR ............................................. 3
- MATH 1414 College Algebra .................................................. 4

+++Natural Science/Mathematics elective must be selected from any DCCCD approved Natural Science/Mathematics Elective.

+++Social/Behavioral Science Elective must be selected from any DCCCD approved Social/Behavioral Science Elective.

++++Telecommunications Electives – 8 credit hours must be selected from the following:
- EECT 1191 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician ........................................ 1
- EECT 1291 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician ........................................ 2
- EECT 1391 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician ........................................ 3
- EECT 1491 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician ........................................ 4
- EECT 2380 Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician ........................................ 3
- EECT 2381 Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician ........................................ 4
- EECT 2432 Telecommunications Signaling ...................................... 4
- EECT 2437 Wireless Telephony Systems ...................................... 4
- EECT 2440 Telecommunications Central Office Equipment ................ 4
- LOTT 1401 Introduction to Fiber Optics ...................................... 4

++++Humanities/Fine Arts elective must be selected from any DCCCD approved Humanities/Fine Arts electives.

- This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
## TECH PREP ENHANCED SKILLS CERTIFICATE

### TELEPHONY SUPERVISOR

*Eastfield only*

(Students pursuing this certificate program are required to meet all TASP requirements)

**Degree Plan Code:** ES.TELEPHONY

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<tr>
<th>SEMESTER I</th>
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<td>EECT 1444</td>
<td>Telecommunications Broadband Systems 4</td>
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<tr>
<td>EECT 1346</td>
<td>Telecommunications Trafficking Engineering 3</td>
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**SEMESTER II**

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<tr>
<td>EECT 1442</td>
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Minimum Hours Required: 14-15

+Telephony Supervisor elective must be selected from the following:

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<tbody>
<tr>
<td>EECT 1300</td>
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<td>ACNT 1303</td>
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<tr>
<td>ACCT 2301</td>
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</tbody>
</table>

## ELECTRONIC TELECOMMUNICATIONS

*Eastfield only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

**Degree Plan Code:** CERT.ELET.TELECOMM

This one-year program provides the student with the basic skills needed in the electronic telecommunications industry. All of the courses for the one-year certificate are applicable to the Associate in Applied Sciences Degree in Electronic Telecommunications.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>CETT 1403</td>
<td>DC Circuits 4</td>
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<td>CETT 1425</td>
<td>Digital Fundamentals 4</td>
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<tr>
<td>+MATH 1374</td>
<td>Technical Mathematics I 3</td>
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<tr>
<td>OFCT 1171</td>
<td>Keyboarding OR Electronic soldering 1</td>
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<td>EECT 1104</td>
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**SEMESTER II**

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<td>ENGL 1301</td>
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**SEMESTER III**

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<tr>
<td>EECT 2430</td>
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<td>EECT 2439</td>
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<tr>
<td>LOTT 1401</td>
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</table>

Minimum Hours Required: 39

+MATH 1332, MATH 1342, MATH 1314 or MATH 1414 may be substituted for MATH 1374. (This course has been or will be revised effective, Fall 2000).
**ELECTRONIC TELECOMMUNICATIONS--TECHNICAL PLATFORM**

*Eastfield only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ELET.PLATFORM

This certificate is designed to prepare students for entry-level jobs in the electronics industry. All of the courses in this certificate are applicable to the Associate in Applied Sciences Degree in Electronics/Computer Technology or Electronic Telecommunications.

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<tr>
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<td>CETT 1425 Digital Fundamentals</td>
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<tr>
<td>CETT 1405 AC Circuits</td>
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</tr>
<tr>
<td>CETT 1429 Solid State Devices</td>
<td>4</td>
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</table>

Minimum Hours Required ........................................................................ 16

**ELECTRONIC TELECOMMUNICATIONS--WIRELESS COMMUNICATIONS TECHNOLOGY**

*Eastfield only*

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.ELET.WIRELESS

This certificate is designed to prepare students for employment in the telecommunications industry. This certificate program provides students broad-based knowledge of wireless technology and its associated hardware. All of the courses for this certificate are applicable to the Associate in Applied Sciences Degree in Electronic Telecommunications.

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<tr>
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<tbody>
<tr>
<td>CETT 1403 DC Circuits</td>
<td>4</td>
</tr>
<tr>
<td>CETT 1425 Digital Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech</td>
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<td>ENGL 1301 Composition I</td>
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<td>SEMESTER II</td>
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<tr>
<td>CETT 1405 AC Circuits</td>
<td>4</td>
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<tr>
<td>CETT 1429 Solid State Devices</td>
<td>4</td>
</tr>
<tr>
<td>EECT 1401 Introduction to Telecommunications</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1332 College Mathematics I OR MATH 1374 OR Technical Mathematics I</td>
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</tr>
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<td>SEMESTER III</td>
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<tr>
<td>EECT 2430 Telecommunications Switching</td>
<td>4</td>
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<tr>
<td>EECT 2439 Communication Circuits</td>
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<td>SEMESTER IV</td>
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<td>EECT 2432 Telecommunications Signaling</td>
<td>4</td>
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<td>EECT 2437 Wireless Telephony Systems</td>
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<tr>
<td>EECT 2440 Telecommunications Central Office Equipment</td>
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Minimum Hours Required ........................................................................ 46

☐ This course has been or will be revised effective, Fall 2000.
**ELECTRONIC TELECOMMUNICATIONS--CONVERGENCE TECHNOLOGY**

*North Lake only*

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.ELET.TELEC.CONV

This program is designed to prepare students for a career in telecommunications. In partnership with NEC of America Corporation, North Lake College will prepare students to enter the field of electronics digital telephony and telecommunications. As part of their education, students will receive training on state-of-the-art telephony equipment at NEC's national training facility located in Irving, Texas.

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<td>MATH 1314 College Algebra OR</td>
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<td>PHYS 1470 Applied Physics</td>
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**SEMESTER II**

|  |
|------------------|---|
| EECT 1401 Introduction to Telecommunications | 4 |
| CETT 1405 AC Circuits | 4 |
| EECT 2433 Telephone Systems | 4 |
| +Elective Social/Behavioral Science | 3 |
|  | 15 |

**SEMESTER III**

|  |
|------------------|---|
| EECT 2432 Telecommunications Signaling | 4 |
| CETT 1429Solid State Devices | 4 |
| SPCH 1311 Introduction to Speech Communication | 3 |
| EECT 2430 Telecommunications Switching | 4 |
| +Elective Telecommunications Electives | 3-4 |
|  | 18-19 |

**SEMESTER IV**

|  |
|------------------|---|
| EECT 1491 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician | 4 |
| CETT 1441Solid State Circuits | 4 |
| CETT 1457Linear Integrated Circuits | 4 |
| +Elective Humanities/Fine Arts | 3 |
| EECT 2380 Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician | 3 |
|  | 18 |

Minimum Hours Required: 65-70

+ Social/Behavioral Science Electives must be selected from the following:

|  |
|------------------|---|
| ANTH 2346 Introduction to Anthropology | 3 |
| ARTS 1301 Art Appreciation | 3 |
| GOVT 2301 American Government | 3 |
| HIST 1301 History of the United States | 3 |
| HIST 1302 History of the United States | 3 |
| HIST 2311 Western Civilization | 3 |
| HIST 2312 Western Civilization | 3 |
| HUMA 1301 Introduction to the Humanities | 3 |
| PHIL 1301 Introduction to Philosophy | 3 |
| SPAN 1411 Beginning Spanish | 4 |

++Telecommunications Electives must be selected from the following:

|  |
|------------------|---|
| EECT 2432 Telecommunications Signaling | 4 |
| EECT 2440 Telecommunications Central Office Equipment | 4 |
| LOTT 1401 Introduction to Fiber Optics | 3 |
| EECT 2437 Wireless Telephony Systems | 4 |
| EECT 2381 Cooperative Education-Electrical, Electronic and Communications Engineering Technology/Technician | 3 |

+++Humanities/Fine Arts elective must be selected from any DCCCD approved Humanities/Fine Arts course.

☐ This course has been or will be revised effective, Fall 2000.

**NOTE:** Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ELECTRONIC TELECOMMUNICATIONS--CONVERGENCE TECHNOLOGY

North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ELET.TELEC.CON

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<td>SEMESTER I</td>
<td>CETT 1403 DC Circuits 4</td>
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<tr>
<td>SEMESTER II</td>
<td>CETT 1405 AC Circuits 4</td>
</tr>
<tr>
<td>SEMESTER III</td>
<td>CETT 1429 Solid State Devices 4</td>
</tr>
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</table>

Minimum Hours Required 38

ELECTRONIC TELECOMMUNICATIONS--TECHNICAL PLATFORM

North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.ELET.PLATFORM.NLC

This certificate is designed to prepare students for entry-level jobs in the electronics industry. All of the courses in this certificate are applicable to the Associate in Applied Sciences Degree in Electronics/Computer Technology or Electronic Telecommunications.

<table>
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<tr>
<th>SEMESTER</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
<td>CETT 1403 DC Circuits 4</td>
</tr>
<tr>
<td>SEMESTER II</td>
<td>CETT 1405 AC Circuits 4</td>
</tr>
</tbody>
</table>

Minimum Hours Required 20
This curriculum is designed to prepare a graduate to work as a technician on devices that require digital circuits such as computers, test equipment, automatic control units and central distribution systems. The student will learn schematic interpretation, test equipment usage, and technical communications.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CETT 1403 DC Circuits</th>
<th>CETT 1401 Composition I</th>
<th>MATH 1374 Technical Mathematics I AND</th>
<th>+++Elective Natural Science</th>
<th>+++Elective Social/Behavioral Science</th>
<th>CREDIT HOURS</th>
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<td>13-17</td>
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<td>SEMESTER II</td>
<td>CETT 1405 AC Circuits</td>
<td>CETT 1425 Digital Fundamentals</td>
<td>CETT 1429 Solid State Devices</td>
<td>SPCH 1311 Introduction to Speech Communication</td>
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</tr>
<tr>
<td>SEMESTER III</td>
<td>CETT 1441 Solid State Circuits</td>
<td>CETT 1445 Microprocessor</td>
<td>CETT 1449 Digital Systems</td>
<td>+++Elective Technical Elective</td>
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<tr>
<td>SEMESTER IV</td>
<td>CETT 1457 Linear Integrated Circuits</td>
<td>CETT 2433 Digital Computer Circuits</td>
<td>CETT 2435 Advanced Microprocessors</td>
<td>CETT 2449 Research and Project Design</td>
<td>+++Elective Humanities/Fine Arts</td>
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</table>

Minimum Hours Required ............................................. 62-67
TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Electronics/Computer Technology and provide the student advanced skills required by the industry to specialize in Computer Technology or Telecommunications.

COMPUTER TECHNOLOGY

Eastfield only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.ELET.COMP.TECH

<table>
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<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>CETT 2435 Advanced Microprocessors .................. 4</td>
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<tr>
<td>CPMT 1447 Computer System Peripherals .............. 4</td>
</tr>
<tr>
<td>CPMT 1449 Computer Networking Technology .......... 4</td>
</tr>
<tr>
<td>CPMT 2445 Computer System Troubleshooting .......... 4</td>
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</table>

Minimum Hours Required ......................................... 16

TELECOMMUNICATIONS

Eastfield only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.ELET.TELECOMM

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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<td>EECT 1401 Introduction to Telecommunications ....... 4</td>
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<tr>
<td>EECT 2430 Telecommunications Switching .............. 4</td>
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<tr>
<td>EECT 2432 Telecommunications Signaling .............. 4</td>
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<tr>
<td>12</td>
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</table>

Minimum Hours Required ......................................... 12

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.
ELECTRONICS/COMPUTER TECHNOLOGY -- BASIC ELECTRONICS TECHNOLOGY

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ELET.COMP.BASIC

This one-year program provides the student with the basic skills needed in the electronic industry. All of the courses for the one-year certificate are applicable to the Associate in Applied Sciences Degree in Electronics/Computer Technology.

<table>
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<tr>
<th>CREDIT</th>
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<td>EECT 1104</td>
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<td>INTC 1307</td>
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<td>CETT 1445</td>
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<tr>
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<td>CETT 1449</td>
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</table>

Minimum Hours Required .................................. 38

☐ This course has been or will be revised effective, Fall 2000.
ELECTRONICS/COMPUTER TECHNOLOGY -- SEMICONDUCTOR MANUFACTURING TECHNOLOGY

Eastfield only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ELET.COMP.SEMI4

This program prepares the student to perform the technical tasks within a wafer fabrication area and includes monitoring process output parameters, analyzing and troubleshooting process related problems, analyzing various chemical reactions, and making decisions which will improve yield of various wafer lots. The course of study may involve participating in wafer experiments or designing of experiments to find the source of process problems or measurement of process limits. Emphasis is placed on working closely with all members of the semiconductor manufacturing team.

CREDIT HOURS

SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>MATH 1374☐</td>
<td>Technical Mathematics I OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
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<td>ENTC 1445</td>
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SEMESTER II

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<tr>
<td>CETT 1405</td>
<td>AC Circuits</td>
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<td>CETT 1429</td>
<td>Solid State Devices</td>
<td>4</td>
</tr>
<tr>
<td>RBTC 2445☐</td>
<td>Robot Application, Set-Up and Testing</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1405</td>
<td>Introductory Chemistry I OR</td>
<td>4</td>
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<td>CHEM 1411</td>
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SEMESTER III

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<tbody>
<tr>
<td>CETT 1425</td>
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<td>CPMT 1403</td>
<td>Introduction to Computer Technology</td>
<td>4</td>
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<tr>
<td>CETT 1457</td>
<td>Linear Integrated Circuits</td>
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<tr>
<td>SMFT 1343</td>
<td>Semiconductor Manufacturing Technology I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1407</td>
<td>Introductory Chemistry II OR</td>
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<tr>
<td>CHEM 1412</td>
<td>General Chemistry OR</td>
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<tr>
<td>PHYS 1470</td>
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SEMESTER IV

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<thead>
<tr>
<th>Course</th>
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<td>ELMT 2433</td>
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<tr>
<td>SMFT 2231</td>
<td>RF Power Systems</td>
<td>2</td>
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<tr>
<td>QCTC 1343</td>
<td>Quality Assurance</td>
<td>3</td>
</tr>
<tr>
<td>SMFT 2343</td>
<td>Semiconductor Manufacturing Technology II OR</td>
<td>3</td>
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<tr>
<td>EECT 2380</td>
<td>Cooperative Education – Computer Engineering Technology Technician</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>+Elective</td>
<td>Social/Behavioral Science</td>
<td>3</td>
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</table>

Minimum Hours Required..................................66-67

+Elective—must be selected from the following:

Any ARTS, HUMA, MUSI or PHIL course.

++Elective—must be selected from the following:

Any GOVT, HDEV, HIST or PSYC course

☐ This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
# ELECTRONICS TECHNOLOGY

**Mountain View and North Lake only**

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.ELETRONICS.TECH

This program prepares students for entry-level electronic technician positions by providing training in digital and analog theory and practical skills.

## CREDIT HOURS

### SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CETT 1403</td>
<td>DC Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>TECM 1341</td>
<td>Technical Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
<td>(4)</td>
</tr>
<tr>
<td>+Elective</td>
<td>Humanities/ Fine Arts</td>
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<tr>
<td>++Elective</td>
<td>Social/Behavioral Science</td>
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Total: 16-17

### SEMESTER II

<table>
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<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CETT 1405</td>
<td>AC Circuits</td>
<td>4</td>
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<tr>
<td>CECF 1429</td>
<td>Solid State Devices</td>
<td>4</td>
</tr>
<tr>
<td>INTC 1307</td>
<td>Electronic Test Equipment</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1405</td>
<td>Concepts in Physics OR</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1407</td>
<td>Concepts in Physics</td>
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Total: 18

### SEMESTER III

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<th>Course</th>
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<tbody>
<tr>
<td>CETT 1449</td>
<td>Digital Systems</td>
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<td>CPMT 1403</td>
<td>Introduction to Computer Technology</td>
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Total: 16

### SEMESTER IV

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CETT 2433</td>
<td>Digital Computer Circuits</td>
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<tr>
<td>+++Electives</td>
<td>Technical</td>
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<tr>
<td>++++Electives</td>
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<td>3-4</td>
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Total: 17-18

Minimum Hours Required: 67-69

++ Elective must be selected from the following:

- Any GOVT, HDEV, HIST or PSYC course
- +Elective must be selected from the following:
  - Any ARTS, HUMA, MUSI, or PHIL course.

+++ Technical electives must be selected from the following with approval from an Electronics Technology professor:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVNC 1303</td>
<td>Introduction to Aircraft Electronic Systems</td>
<td>3</td>
</tr>
<tr>
<td>AVNC 1443</td>
<td>Aircraft Electrical and Electronic Systems Installation</td>
<td>4</td>
</tr>
<tr>
<td>AVNC 1453</td>
<td>Operational Testing of Aircraft Electronics Systems</td>
<td>4</td>
</tr>
<tr>
<td>CETT 1457</td>
<td>Linear Integrated Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CETT 2443</td>
<td>Principles of Color Television</td>
<td>3</td>
</tr>
<tr>
<td>CETT 2449</td>
<td>Research and Project Design</td>
<td>4</td>
</tr>
<tr>
<td>CPMT 1447</td>
<td>Computer System Peripherals</td>
<td>4</td>
</tr>
<tr>
<td>CPMT 1449</td>
<td>Computer Network Technology</td>
<td>4</td>
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<tr>
<td>CPMT 2437</td>
<td>Microcomputer Interfacing</td>
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<td>CPMT 2445</td>
<td>Computer System Troubleshooting</td>
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<td>EECT 1191</td>
<td>Special Topics in Electrical, Electronic and Communications Engineering Technology/ Technician</td>
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<td>Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician</td>
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<td>EECT 1391</td>
<td>Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician</td>
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<tr>
<td>EECT 1491</td>
<td>Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician</td>
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<td>EECT 2380</td>
<td>Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician</td>
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<td>EECT 2439</td>
<td>Communications Circuits</td>
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<td>LOTT 2340</td>
<td>Microwave Fundamentals</td>
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<td>RBTC 2445</td>
<td>Robot Application, Set-up and Testing</td>
<td>4</td>
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</table>

+++ Electives must be selected from the following list with the approval of an Electronics Technology professor and must be a separate course than those chosen to meet the +++Elective:

- CECF 2449 Research and Project Design | 4 |
- CPMT 2437 Microcomputer Interfacing | 4 |
- EECT 1391 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician | 3 |
- EECT 1491 Special Topics in Electrical, Electronic and Communications Engineering Technology/Technician | 4 |
- RBTC 2445 Robot Application, Set-up and Testing | 4 |
- EECT 2380 Cooperative Education - Electrical, Electronic and Communications Engineering Technology/Technician | 3 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Electronics Technology and provide the student advanced skills required by the industry to specialize in Avionics, Automated Manufacturing or Computer Maintenance.

AVIONICS

Mountain View only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.ELET.AVIONICS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>AVNC 1303</td>
<td>Introduction to Aircraft Electronic Systems... 3</td>
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<tr>
<td>AVNC 1443</td>
<td>Aircraft Electrical and Electronic Systems Installation... 4</td>
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<tr>
<td>AVNC 1453</td>
<td>Operational Testing of Aircraft Electronic Systems... 4</td>
</tr>
</tbody>
</table>

Minimum Hours Required................................. 11

AUTOMATED MANUFACTURING

Mountain View and North Lake only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.ELET.AUTOMATED

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>ENTC 1445</td>
<td>Fluid Power... 4</td>
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<td>ELMT 2433</td>
<td>Industrial Electronics... 4</td>
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<tr>
<td>RBTC 2445</td>
<td>Robot Application, Set-Up and Testing... 4</td>
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</table>

Minimum Hours Required................................. 12

COMPUTER MAINTENANCE

Mountain View and North Lake only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.ELET.COMP.MAINT

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>CPMT 1447</td>
<td>Computer System Peripherals... 4</td>
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<tr>
<td>CPMT 1449</td>
<td>Computer Networking Technology... 4</td>
</tr>
<tr>
<td>CPMT 2445</td>
<td>Computer System Troubleshooting... 4</td>
</tr>
</tbody>
</table>

Minimum Hours Required................................. 12

This is a Tech-Prep program. Students interested in pursuing the Tech Prep Enhanced Skills Certificate need to consult with their advisor.
ELECTRONICS TECHNOLOGY – AVIONICS TECHNOLOGY

Mountain View only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ELET.AVIONICS

This one-year certificate program is intended to provide the student with a basic electronics background and a level of knowledge and practical skills adequate to gain entry-level employment in the installation and maintenance of Aircraft Electronics Systems (Avionics). This program will concentrate on the technical knowledge offered in a lecture/supervised laboratory mode. This program is designed for A/P aircraft mechanics who install avionics.

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<tbody>
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<td>Minimum Hours Required ..................................33-34</td>
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+Elective - must be selected from the following:

| AVNC 1443     | Aircraft Electrical and Electronics Systems Installation | 4 |
| AVNC 1453     | Operational Testing of Aircraft Electronic Systems     | 4 |
| CETT 2443     | Principles of Color Television                        | 4 |

☐ This course has been or will be revised effective, Fall 2000.
ELECTRONICS TECHNOLOGY -- SEMICONDUCTOR MANUFACTURING TECHNOLOGY

Mountain View and North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ELET.SEMI

This program prepares the student to perform the technical tasks within a wafer fabrication area and includes monitoring process output parameters, analyzing and troubleshooting process related problems, analyzing various chemical reactions, and making decisions which will improve yield of various wafer lots. The course of study may involve participating in wafer experiments or designing of experiments to find the source of process problems or measurement of process limits. Emphasis is placed on working closely with all members of the semiconductor manufacturing team.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>CETT 1403 DC Circuits</td>
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<td>ENGL 1301 Composition I</td>
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<td>MATH 1374 □ Technical Mathematics I OR</td>
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<td>MATH 1414 College Algebra</td>
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<td>ENTC 1445 Fluid Power</td>
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<td>CETT 1429 Solid State Devices</td>
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<tr>
<td>RBTC 2445 Robot Application, Set-Up and Testing</td>
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<tr>
<td>CHEM 1405 Introductory Chemistry I OR</td>
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<tr>
<td>CHEM 1411 General Chemistry</td>
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<tr>
<td>+Elective Humanities/Fine Arts</td>
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<tr>
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<tr>
<td>CPMT 1403 Introduction to Computer Technology</td>
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<tr>
<td>CETT 1457 Linear Integrated Circuits</td>
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<td>SMFT 1343 Semiconductor Manufacturing Technology I</td>
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<tr>
<td>CHEM 1407 Introductory Chemistry II OR</td>
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<td>CHEM 1412 General Chemistry OR</td>
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<tr>
<td>PHYS 1470 Applied Physics OR</td>
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<tr>
<td>PHYS 1405 Concepts in Physics</td>
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<td>SMFT 2231 RF Power Systems</td>
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<td>SMFT 2343 Semiconductor Manufacturing Technology II OR</td>
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<td>CETT 2380 Cooperative Education – Computer Engineering Technology / Technician</td>
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<td>SPCH 1311 Introduction to Speech Communication</td>
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<tr>
<td>+Elective Social/Behavioral Science</td>
<td>3</td>
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<tr>
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</table>

Minimum Hours Required ........................................ 66-67

+Elective - must be selected from the following:
Any ARTS, HUMA, MUSI or PHIL course.

++Elective - must be selected from the following:
Any GOVT, HDEV, HIST or PSYC course.

□ This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ENGINE TECHNOLOGY--
MOTORCYCLE MECHANICS

(Certificate)

(Students pursuing this certificate program are waivered from TASP requirements.)

Degree Plan Code: CERT.ENGINE.MOTORCYCLE

This program is designed to train students to meet entry level requirements in the field of motorcycle mechanics. This will include diagnosis, repair, and maintenance of foreign and domestic motorcycles. Included in this program is the study of carburetion, ignition, and electrical systems, engine overhaul and tune-up, and motorcycle chassis. Throughout the entire program an emphasis is placed on the latest factory recommended techniques.

CREDIT HOURS

SEMESTER I
MTRC 1405 Motorcycle Service Principles ................. 4
MTRC 1402 Motorcycle Tune Up ..................................... 4
SMER 1416 Motorcycle Two Stroke Engine/Transmission ............. 4

SEMESTER II
SMER 1419 Motorcycle Four Stroke Engine/Transmission ............. 4
SMER 1422 Motorcycle Electrical Systems ......................... 4
MTRC 1408 Motorcycle Chassis and Drive Systems .................. 4

SEMESTER - SUMMER SESSION
SMER 1371 Service Department Operations OR
MTRC 1366 Practicum (or Field Experience) - Motorcycle Mechanic and Repairer OR
MTRC 1380 Cooperative Education - Motorcycle Mechanic and Repairer ................. 3

Minimum Hours Required ........................................... 27

ENGINE TECHNOLOGY--OUTBOARD ENGINE

(Certificate)

(Students pursuing this certificate program are waivered from TASP requirements.)

Degree Plan Code: CERT.ENGINE.OUTBOARD

This program is designed to train students to meet entry level requirements in the field of outboard marine engine mechanics. This will include theory, diagnosis, repair, overhaul and maintenance of outboard marine engines. Included in this program is the study of outboard marine engine fuel, electrical and ignition systems, engine overhaul and tune-up, and lower units. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the outboard marine engine service industry.

Since not all courses in this program are transferable, students enrolling in this program who may plan to transfer to a four-year institution should consult with an advisor or counselor regarding transfer requirements.

CREDIT HOURS

SEMESTER I
SMER 1404 Outboard Service Principles ..................... 4
SMER 1401 Outboard Tune Up ..................................... 4
SMER 1407 Outboard Powerhead Overhaul ..................... 4

SEMESTER II
SMER 1410 Outboard Lower Units ............................. 4
SMER 1413 Outboard Electrical Systems ..................... 4
SMER 1371 Service Department Operations OR
SMER 1366 Practicum (or Field Experience) - Small Engine Mechanic and Repairer OR
SMER 1380 Cooperative Education - Small Engine Mechanic and Repairer ................. 3

Minimum Hours Required ........................................... 23
ENGINE TECHNOLOGY--SMALL ENGINE

Cedar Valley only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ENGINE.SMALL

This program is designed to train students to meet entry level requirements in the field of small engine mechanics. This will include theory, diagnosis, repair, overhaul and maintenance of small engines used on lawn mowers, garden tractors, and other small equipment. Included in this program is the study of small engine carburetion and electrical systems, engine overhaul and tune-up, and belt, chain, and direct drive power systems. Throughout the entire program an emphasis is placed on accepted shop techniques used throughout the small engine powered equipment industry.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>Credit Hours</th>
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<tr>
<td>SMER 1428</td>
<td>Small Engine Service Principles 4</td>
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<tr>
<td>SMER 1431</td>
<td>Small Engine Tune Up 4</td>
</tr>
<tr>
<td>SMER 1434</td>
<td>Small Engine Two Stroke Overhaul 4</td>
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<tr>
<td>SMER 1437</td>
<td>Small Engine Four Stroke Overhaul 4</td>
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<tr>
<td>SMER 1425</td>
<td>Small Engine Electrical Systems 4</td>
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<tr>
<td>SMER 1371</td>
<td>Service Department Operations OR</td>
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<tr>
<td>SMER 1366</td>
<td>Practicum (or Field Experience) - Small Engine Mechanic And Repairer OR</td>
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<td>SMER 1380</td>
<td>Cooperative Education - Small Engine Mechanic and Repairer 3</td>
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Minimum Hours Required 23

197
ENGINEERING TECHNOLOGY - ELECTRONICS TECHNOLOGY

Richland only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.ENGINEER.ELECTRO

To meet the needs of the rapidly changing and expanding field of industrial electronics, this program stresses electronic principles and hands-on experience that can be applied to many aspects of advanced electronics. The Electronics core is complemented by Engineering Technology instruction in areas such as CAD, Fluid Power, Mechanics and Manufacturing. This program prepares individuals for technician level employment in electronics and related industries.

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>DFTG 1309</td>
<td>Basic Computer-Aided Drafting</td>
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<td>Quality Assurance</td>
<td>3</td>
</tr>
<tr>
<td>MCHN 1352</td>
<td>Intermediate Machine Shop I</td>
<td>3</td>
</tr>
<tr>
<td>CETT 1403</td>
<td>DC Circuits</td>
<td>4</td>
</tr>
<tr>
<td>TECM 1341</td>
<td>Technical Algebra OR</td>
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<td>MATH 1414</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<td>INTC 1307</td>
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<td>CETT 1405AC</td>
<td>Circuits</td>
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<tr>
<td>CETT 1429</td>
<td>Solid State Devices</td>
<td>4</td>
</tr>
<tr>
<td>TECM 1317</td>
<td>Technical Trigonometry OR</td>
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<td>MATH 1316</td>
<td>Plane Trigonometry</td>
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<td>CETT 1331</td>
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<td>INMT 1447</td>
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<td>CETT 1425</td>
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<td>ENTC 1445</td>
<td>Fluid Power</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1401</td>
<td>Introductory General Physics</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
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<tr>
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</table>

Minimum Hours Required.................................................. 67-72

+ Select Social/Behavioral Science elective from the DCCCD approved courses.

++ Select Humanities/Fine Arts elective from the DCCCD approved courses.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an engineering technology faculty member regarding transfer requirements and the transferability of these course to the four-year institution.
# ENGINEERING TECHNOLOGY – ELECTRONICS TECHNOLOGY

*Richland only*

(Certificate)

(Students pursuing this certificate program are waived from all TASP requirements.)

Degree Plan Code: CERT.ENGR.ELECTRONICS

This one-year program develops the basic skills necessary for entry-level positions in electronics and related industries. Computer-aided instruction and analysis studies include electronic devices and their application in analog and digital circuits. All courses required for the certificate are applicable to the Associate in Applied Sciences Degree in Electronic Technology.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
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<td>CETT 1403 DC Circuits</td>
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<tr>
<td>TECM 1341 Technical Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414 College Algebra</td>
<td>(4)</td>
</tr>
<tr>
<td>CETT 1331 Technical Programming</td>
<td>3</td>
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<tr>
<td>DFTG 1309 Basic Computer-Aided Drafting</td>
<td>3</td>
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<tr>
<td>MCHN 1352 Intermediate Machine Shop I</td>
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</tr>
<tr>
<td>SEMESTER II</td>
<td>CREDIT HOURS</td>
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<tr>
<td>CETT 1405 AC Circuits</td>
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<td>CETT 1429 Solid State Devices</td>
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<tr>
<td>CETT 1425 Digital Fundamentals</td>
<td>4</td>
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<tr>
<td>TECM 1317 Technical Trigonometry OR</td>
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<tr>
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</tr>
<tr>
<td>SEMESTER III</td>
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<td>SPCH 1311 Introduction to Speech Communication</td>
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<tr>
<td>INTC 1307 Electronic Test Equipment</td>
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</tbody>
</table>

Minimum Hours Required ........................................ 37-38

# ENGINEERING TECHNOLOGY – CAD/CAM

*Richland only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.ENGR.CAD/CAM

This certificate has been developed to provide skills for entry level CAD positions as well as the manufacturing specialists who requires training necessary for the integration of CAD and the CNC machines.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>QCTC 1343 Quality Assurance</td>
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<td>MCHN 1352 Intermediate Machine Shop</td>
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<td>TECM 1341 Technical Algebra OR</td>
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<td>TECM 1317 Technical Trigonometry OR</td>
<td>3</td>
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<tr>
<td>MATH 1316 Plane Trigonometry</td>
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<td>Minimum Hours Required ........................................ 28-29</td>
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</table>
**ENGINEERING TECHNOLOGY – COMPUTER-AIDED DESIGN**

*Richland only*

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ENGINEER.CAD

Design skills are required of today's CAD professionals. Knowledge of FEA, material analysis, applied mechanics, design for manufacture and CAD/CAM provides a strong base of information needed in design development. Using the parametric approach and integrating the computer as a true instrument of design - not a drafting tool.

### SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>MCHN 1352</td>
<td>Intermediate Machine Shop I</td>
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<td>CETT 1403DC</td>
<td>Circuits</td>
<td>4</td>
</tr>
<tr>
<td>TECM 1341</td>
<td>Technical Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>DFTG 1309</td>
<td>Basic Computer-Aided Drafting</td>
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17-18

### SEMESTER II

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<td>ENGR 1304</td>
<td>Engineering Design Graphics (3)</td>
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<td>CAD-CAM</td>
<td>3</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<td>CETT 1405AC</td>
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<tr>
<td>TECM 1317</td>
<td>Technical Trigonometry OR</td>
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16-17

### SEMESTER III

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<tbody>
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<td>Technical Illustration</td>
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<td>QCTC 1343</td>
<td>Quality Assurance</td>
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<td>PHYS 1401</td>
<td>Introductory General Physics</td>
<td>4</td>
</tr>
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<td>TECM 1349</td>
<td>Technical Math Applications OR</td>
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16-18

### SEMESTER IV

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<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
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<td>3</td>
</tr>
<tr>
<td>ENTC 2380</td>
<td>Cooperative Education – Engineering Technology/Technician, General</td>
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<td>DFTG 2340</td>
<td>Solid Modeling/Design</td>
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</tr>
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<td>PHYS 1402</td>
<td>Introductory General Physics</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech</td>
<td>3</td>
</tr>
<tr>
<td>+++Elective</td>
<td>Social/Behavioral Science</td>
<td>3</td>
</tr>
</tbody>
</table>

16

Minimum Hours Required: 65-69

+Select Humanities/Fine Arts course from DCCCD approved courses.

++Choose one of the following technical electives:

- DFTG 2344 Strength of Materials                      3
- DFTG 2350 Geometric Dimensioning and Tolerancing   3

+++Select Social/Behavioral Science course elective from DCCCD approved courses.

**NOTE:** Students enrolling in this program who plan to transfer to a four-year institution should consult an engineering technology faculty member regarding transfer requirements and the transferability of these courses to the four-year institution.
## ENGINEERING TECHNOLOGY -- COMPUTER AIDED DESIGN

*Richland only*

(Skills Achievement Award)

Degree Plan Code: SA.ENGR.CAD

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>DFTG 1309</td>
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<tr>
<td>DFTG 1405</td>
<td>Technical Drafting .................. 4</td>
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<tr>
<td>DFTG 2312</td>
<td>Technical Illustration .............. 3</td>
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Minimum Hours Required.................................................. 10

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<td>ENT 1391</td>
<td>Special Topics Engineering Technology/Technician, General ....... 3</td>
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</table>

Minimum Hours Required.................................................. 9

## ENGINEERING TECHNOLOGY -- PARAMETRIC AUTOMATED DESIGN

*Richland only*

(Skills Achievement Award)

Degree Plan Code: SA.ENGR.PARA.DESIGN

<table>
<thead>
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<tbody>
<tr>
<td>DFTG 2340</td>
<td>Solid Modeling/Design .................. 3</td>
</tr>
<tr>
<td>DFTG 2350</td>
<td>Geometric Dimensioning and Tolerancing ........... 3</td>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>ENT 1391</td>
<td>Special Topics Engineering Technology/Technician, General ....... 3</td>
</tr>
</tbody>
</table>

Minimum Hours Required.................................................. 9
FASHION DESIGN

EI Centro only

(Associate in Applied Sciences Degree)

The Fashion design freshman student is provided a core curriculum of study related to the fashion industry. The basic fashion core, along with the general education courses, enables the student to enter a specialized track of either Apparel Design or Pattern Design in the second year of studies. Upon completion an Associate in Applied Sciences Degree is awarded.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
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</table>

**CORE CURRICULUM**

**SEMESTER I**
- FSHD 1324 Ready-to-Wear Construction ............... 3
- FSHN 1313 Basic Color Theory and Application ....... 3
- FSHN 1309 History of Costume Through the 18th Century ......... 1
- FSHN 1317 Pattern Drafting I ....................... 3
- ENGL 1301 Composition I ............................ 3
- MATH 1332 College Mathematics I ................. 2

**SEMESTER II**
- FSHN 1325 Basic Women's Tailoring ............. 3
- FSHN 1123 Introduction to Mass Production .......... 1
- FSHD 1322 Fashion Sketching ..................... 3
- FSHN 1310 History of Costume: 18th Century to Present ......... 3
- FSHN 1318 Pattern Drafting II ................... 3
- FSHN 1319 Pattern Drafting III .................. 3
- SPCH 1311 Introduction to Speech Communication .......... 3

Minimum Hours Required ........................................... 37

---

FASHION DESIGN--APPAREL DESIGN

EI Centro College only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.FASHION.APPAREL

The apparel designer converts the design idea into an industrial paper pattern used in the mass production of clothing. New style trends each season demand individual creative thinking to develop saleable designs. Upon successful completion of the program, the student enters a women's wear or children's wear manufacturing company as an assistant in the design department.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
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</thead>
</table>

**SEMESTERS I and II**
- Core Curriculum ........................................ 37

**SEMESTER III**
- FSHN 1301 Textiles .................................... 3
- FSHD 1217 Apparel Computer Systems .............. 2
- FSHN 1449 Intermediate Pattern Drafting .......... 4
- FSHD 1391 Special Topics in Fashion Design and Illustration ............ 3
- FSHD 2343 Fashion Collection Design ............. 3
- HUMA 1301 Introduction to the Humanities OR 3
- PHIL 1301 Introduction to Philosophy .......... 2

**SEMESTER IV**
- FSHD 1218 Apparel Computer Systems ............ 2
- FSHN 2432 Advanced Pattern Drafting .............. 4
- FSHD 2344 Fashion Collection Production ........ 3
- FSHD 2205 Draping .................................... 2
- PSYC 2302 Applied Psychology .................. 2
- +Elective ................................................. 3

Minimum Hours Required ........................................... 72

+Elective-Must be selected from the following:

- Any ARTS course ......................................... 3
- FSHN 2380 Cooperative Education-Commercial Garment and Apparel Worker .... 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
FASHION DESIGN--PATTERN DESIGN

El Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.FASHION.PATTERN

The pattern designer converts the fashion sketch or original garment into an industrial paper pattern used in the mass production of clothing. Drafting is the skill of developing a flat pattern with measurements. Draping is the skill of developing a pattern by placing cloth over a dress form. Upon completion of the program, the student enters a women's wear or children's wear manufacturing company as an assistant in the pattern department.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTERS I and II</td>
</tr>
<tr>
<td>Core Curriculum .............................................................. 37</td>
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<tr>
<td>37</td>
</tr>
</tbody>
</table>

| SEMESTER III |
| FSHN 1301 Textiles .................................................. 3 |
| FSHD 1217 Apparel Computer Systems .................. 2 |
| FSHN 1449 Intermediate Pattern Drafting .............. 4 |
| HUMA 1301 Introduction to the Humanities OR .... 3 |
| PHIL 1301 Introduction to Philosophy ............... (3) |
| PSYC 2302 Applied Psychology .......................... 3 |
| 15 |

| SEMESTER IV |
| FSHD 1218 Apparel Computer Systems ................. 2 |
| FSHN 2432 Advanced Pattern Drafting ................. 4 |
| FSHD 2205 Draping ........................................ 2 |
| FSHN 2241 Pattern Grading .............................. 2 |
| +Elective .................................................. 3-4 |
| 13-14 |

Minimum Hours Required........................................... 65-66

+Elective—must be selected from the following:

| CREDIT |
| Any ARTS course .................................................. 3 |
| CISC 1470 Introduction to Computer Concepts and Applications ........................................ 4 |
| FSHN 2380 Cooperative Education-Commercial Garment and Apparel Worker .................................. 3 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
FOOD AND HOSPITALITY SERVICE

EI Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.FOOD.HOSPITALITY

The Food and Hospitality degree program prepares students to assume a variety of responsible positions in the food and hospitality industry.

**CREDIT HOURS**

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HAMG 1321</td>
<td>Introduction to Hospitality Industry OR</td>
<td>3</td>
</tr>
<tr>
<td>IFWA 1371</td>
<td>Organization and Management*</td>
<td>(3)</td>
</tr>
<tr>
<td>RSTO 1306</td>
<td>Facilities Layout and Design</td>
<td>3</td>
</tr>
<tr>
<td>CULA 1301</td>
<td>Basic Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>CULA 1305</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>++TECM 1303</td>
<td>Technical Mathematics AND Natural Science</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
<td>(4)</td>
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**SEMESTER II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>RSTO 1304</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 1313</td>
<td>Hospitality Supervision</td>
<td>3</td>
</tr>
<tr>
<td>CULA 2331</td>
<td>Advanced Food Preparation</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 1325</td>
<td>Purchasing for Hospitality Operations</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 1317</td>
<td>Nutrition for the Food Service Professional</td>
<td>3</td>
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**SEMESTER III**

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<tr>
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<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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**SEMESTER IV**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CULA 1441</td>
<td>American Regional Cuisine</td>
<td>4</td>
</tr>
<tr>
<td>RSTO 1311</td>
<td>Marketing of Hospitality Services* OR</td>
<td>3</td>
</tr>
<tr>
<td>FDNS 1391</td>
<td>Special Topics in Foods and Nutrition Studies, General**</td>
<td>(3)</td>
</tr>
<tr>
<td>RSTO 1380</td>
<td>Cooperative Education-Food and Beverage/ Restaurant Operations Manager</td>
<td>3</td>
</tr>
<tr>
<td>++Elective</td>
<td>Humanities/Fine Arts</td>
<td>3</td>
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**NOTE:** Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

**SEMESTER V**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>RSTO 2301</td>
<td>Principles of Food and Beverage Controls</td>
<td>3</td>
</tr>
<tr>
<td>CULA 1445</td>
<td>International Cuisine</td>
<td>4</td>
</tr>
<tr>
<td>RSTO 2380</td>
<td>Cooperative Education-Food and Beverage/Restaurant Operations Manager</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>+Elective</td>
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**Minimum Hours Required** .................................... 63-70

+Elective - must be selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PSTR 1301</td>
<td>Fundamentals of Baking</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 1319</td>
<td>Viticulture and Enology</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 2307</td>
<td>Catering</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 1191</td>
<td>Special Topics in Food and Beverage/Restaurant Operations Manager</td>
<td>1</td>
</tr>
<tr>
<td>RSTO 1291</td>
<td>Special Topics in Food and Beverage/Restaurant Operations Manager</td>
<td>2</td>
</tr>
<tr>
<td>RSTO 1391</td>
<td>Special Topics in Food and Beverage/Restaurant Operations Manager</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1340</td>
<td>Hospitality Legal Issues</td>
<td>3</td>
</tr>
<tr>
<td>RSTO 1311</td>
<td>Marketing of Hospitality Services*</td>
<td>3</td>
</tr>
<tr>
<td>CULA 1409</td>
<td>Garde Manager</td>
<td>4</td>
</tr>
<tr>
<td>CULA 2302</td>
<td>Saucier</td>
<td>3</td>
</tr>
<tr>
<td>PSTR 1301</td>
<td>Beverage Management</td>
<td>3</td>
</tr>
<tr>
<td>FDNS 1391</td>
<td>Special Topics in Foods and Nutrition Studies, General*</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2307</td>
<td>Hospitality Marketing and Sales*</td>
<td>3</td>
</tr>
</tbody>
</table>

++Elective - must be selected from the following:

- ARTS 1301  Art Appreciation ................... 3
- ENGL 2322  British Literature .................. 3
- ENGL 2327  American Literature ................. 3
- HUMA 1301  Introduction to Humanities .......... 3
- MUSI 1306  Music Appreciation .................. 3
- PHIL 1301  Introduction to Philosophy .......... 3
- DRAM 1310  Introduction to Theatre .............. 3

+++Natural Science Elective:

Students taking TECM 1303 must also select one of the following Natural Science courses:

<table>
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<tbody>
<tr>
<td>BIOL 1408</td>
<td>Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1409</td>
<td>Biological Science</td>
<td>4</td>
</tr>
<tr>
<td>ECOL 1305</td>
<td>People and their Environment</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 1403</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1311</td>
<td>Descriptive Astronomy</td>
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</tr>
<tr>
<td>PHYS 1401</td>
<td>Introductory General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1415</td>
<td>Physical Science</td>
<td>4</td>
</tr>
</tbody>
</table>

*HAMG 1321 is recommended for those interested in Commercial Food Service such as restaurants.

*IFWA 1371 is recommended for those interested in Institutional Food Service such as schools and hospitals.

**RSTO 1311 is recommended for those interested in Restaurant Management.

**FDNS 1391 is suggested for those interested in the areas of hospital dietetics or child nutrition.

**HAMG 2307 is recommended for those interested in the lodging industry.
FOOD AND HOSPITALITY SERVICE

El Centro only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.FHSV.SERVICE

This certificate prepares the student to function as a food service industry employee. All credits earned in this program may be applied toward the Associate in Applied Sciences Degree in Food and Hospitality Service.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>HAMG 1321 Introduction to Hospitality Industry OR 3</td>
</tr>
<tr>
<td>IFWA 1371 Organization and Management (3)</td>
</tr>
<tr>
<td>RSTO 1304 Dining Room Service 3</td>
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<tr>
<td>CULA 1301 Basic Food Preparation 3</td>
</tr>
<tr>
<td>CULA 1305 Sanitation and Safety 3</td>
</tr>
<tr>
<td>ENGL 1301 Composition I 3</td>
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<tr>
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</table>

| SEMESTER II |
| RSTO 1313 Hospitality Supervision 3 |
| CULA 2331 Advanced Food Preparation 3 |
| RSTO 1317 Nutrition for the Food Service Professional 3 |
| RSTO 1306 Facilities, Layout and Design 3 |
| SPCH 1311 Introduction to Speech Communication 3 |
| **15** |

| SEMESTER III |
| RSTO 1311 Marketing of Hospitality Services OR 3 |
| FDNS 1391 Special Topics in Foods and Nutrition Studies, General (3) |
| RSTO 2301 Principles of Food and Beverage Controls 3 |
| +Elective 3 |
| +Elective 1-3 |
| **10-12** |

Minimum Hours Required 40-42

+Elective - must be selected from any of the following:

- RSTO 1191 Special Topics in Food and Beverage/Restaurant Operations Manager 1
- RSTO 1291 Special Topics in Food and Beverage/Restaurant Operations Manager 2
- RSTO 1391 Special Topics in Food and Beverage/Restaurant Operations Manager 3
- HAMG 1340 Saucier 3
- RSTO 1301 Beverage Management 3
- PSTR 2331 Advanced Pastry Shop 3
FOOD AND HOSPITALITY SERVICE -

CERTIFIED FOOD AND HOSPITALITY MANAGER

El Centro only

(Certificate)

(Students pursuing this certificate program are waivered from TASP requirements.)

Degree Plan Code: C1.FHSV.F/H.MANAGER

This certificate prepares the student to function in a variety of dining room and management positions.

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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>HAMG 1321</td>
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<td>RSTO 1304</td>
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<tr>
<td>CULA 1301</td>
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<tr>
<td>SEMESTER II</td>
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<tr>
<td>RSTO 1313</td>
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<tr>
<td>RSTO 1380</td>
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<tr>
<td>+Elective</td>
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<tr>
<td>+Elective</td>
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<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>RSTO 2380</td>
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<tr>
<td>+Elective</td>
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Minimum Hours Required ........................................................................... 27

+Elective - must be selected from any of the following:

- RSTO 1317 Nutrition for the Food Service Professional .... 3
- RSTO 1319 Viticulture and Enology ........................................... 3
- RSTO 1306 Facilities Layout and Design ............................... 3
- RSTO 1325 Purchasing for Hospitality Operations ................ 3
- RSTO 2301 Principles of Food and Beverage Controls ............... 3
- RSTO 1311 Marketing of Hospitality Services ......................... 3
- RSTO 1301 Beverage Management ............................................ 3
- RSTO 2307 Catering ............................................................... 3
- RSTO 1391 Special Topics in Food and Beverage/Restaurant Operations Manager .................. 3

OR Hospitality Spanish

Additional requirements include the following:

A. TABC Certification offered through RSTO 1304
B. Registered Food Service Manager offered through CULA 2302
C. Total of 1000 hours of work experience including 640 hours through Cooperative Education.
# GEOGRAPHIC INFORMATION SYSTEMS TECHNOLOGY

*Eastfield and Mountain View only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.SRVY.GEOGRAPHIC

<table>
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## SEMESTER I

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<tr>
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<tbody>
<tr>
<td>DFTG 1405</td>
<td>Technical Drafting</td>
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<tr>
<td>SRVY 1419</td>
<td>Introduction to Geographic Information Systems</td>
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<tr>
<td>CISC 1470</td>
<td>Introduction to Computer Concepts and Applications</td>
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<tr>
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<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
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|        | 15-16 |

## SEMESTER II

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<th>Course Title</th>
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<td>DFTG 1309</td>
<td>Basic Computer-Aided Drafting</td>
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<tr>
<td>DFTG 1348</td>
<td>Topographical Drafting</td>
<td>3</td>
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<tr>
<td>SRVY 1315</td>
<td>Surveying Calculations I</td>
<td>3</td>
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<tr>
<td>SRVY 2305</td>
<td>Geographic Information Systems</td>
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<table>
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<tr>
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<td>Geographic Information Systems</td>
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## SEMESTER III

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<tr>
<td>SRVY 1491</td>
<td>Special Topics in Surveying</td>
<td>4</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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</table>

|        | 11 |

Minimum Hours Required ........................................ 38-39
**HEALTH INFORMATION MANAGEMENT**

*Mountain View only*

*(Associate in Applied Sciences Degree)*

Degree Plan Code: AAS.HEALTH.MANAGE

Medical Records Technicians are responsible for maintaining components of health information systems consistent with the medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system. Medical Records Technicians possess the technical knowledge and skills necessary to process, maintain, compile and report health information data for reimbursement, facility planning, marketing, risk management, utilization management, quality assessment and research; abstract and code clinical data using appropriate classification systems; and analyze health records according to standards. The medical record technician may be responsible for functional supervision of the various components of the health information system.

### CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>ENGL 1301  Composition I</td>
<td>3</td>
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<tr>
<td>MATH 1314  College Algebra</td>
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<tr>
<td>SCIT 1407  Human Anatomy and Physiology I</td>
<td>4</td>
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<tr>
<td>HITT 1205  Medical Terminology</td>
<td>2</td>
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<tr>
<td>ITSC 1401  Introduction to Computers</td>
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<tbody>
<tr>
<td>SCIT 1408  Human Anatomy and Physiology II</td>
<td>4</td>
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<tr>
<td>BMGT 1303  Principles of Management</td>
<td>3</td>
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<tr>
<td>HITT 1401  Health Data Content and Structure</td>
<td>4</td>
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<tr>
<td>HITT 2231  Medical Terminology-Advanced</td>
<td>2</td>
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<tr>
<td>POFI 1345  Integrated Software Applications II</td>
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<tbody>
<tr>
<td>HITT 1345  Health Care Delivery Systems</td>
<td>3</td>
</tr>
<tr>
<td>HITT 1160  Clinical - Health Information</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>2</td>
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<tr>
<td>MDCA 1302  Human Disease/Pathophysiology</td>
<td>3</td>
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<tr>
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<tr>
<td>SPCH 1311  Introduction to Speech</td>
<td>Communication</td>
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<tbody>
<tr>
<td>PSYC 2302  Applied Psychology</td>
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</tr>
<tr>
<td>HITT 2239  Health Information Organization and Supervision</td>
<td>2</td>
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<tr>
<td>HITT 1441  Coding and Classification Systems</td>
<td>4</td>
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<tr>
<td>HITT 2343  Quality Assessment and Performance Improvement</td>
<td>3</td>
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<tr>
<td>HITT 1255  Health Care Statistics</td>
<td>2</td>
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<tr>
<td>HITT 1253  Legal and Ethical Aspects of Health Information</td>
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<table>
<thead>
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<th>SEMESTER V</th>
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<tbody>
<tr>
<td>HITT 2160  Clinical - Health Information Technology/Technician</td>
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<table>
<thead>
<tr>
<th>SEMESTER VI</th>
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<tbody>
<tr>
<td>HITT 2335  Coding and Reimbursement Methodologies</td>
<td>3</td>
</tr>
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<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HITT 1161  Clinical - Health Information Technology/Technician</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1</strong></td>
</tr>
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</table>

Minimum Hours Required: **68**

+Elective may be selected from the following:

| ARTS 1301  Art Appreciation | 3                                                                 |
| DRAM 1310  Introduction to the Theatre | 3                                                                  |
| HUMA 1301  Introduction to Humanities | 3                                                                 |
| MUSI 1306  Music Appreciation | 3                                                                 |
| PHIL 1301  Introduction to Philosophy | 3                                                                  |
| Foreign Language | 4                                                                 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
HEALTH INFORMATION
MANAGEMENT --
MEDICAL RECORD CODER

Mountain View only

(Certificate)

Degree Plan Code: CERT.HIMT.CODING

(Students pursuing this certificate program are
waived from TASP requirements.)

A Medical Records Coding Specialist assigns and
sequences diseases and procedures with set classification
standards and codes (ICD-9-CM, CPT, and HCFA). Responsibilities include the abstracting of medical
information from outpatient and inpatient commercial, day
surgery, emergency room, clinic and gastroenterology,
medical records for statistical research and study
purposes, and audits of unbilled accounts reports. The
skills required for successful performance of this job
include a working knowledge of human anatomy and
physiology, medical terminology, the disease process,
organization and communication skills.

CREDIT
HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>ENGL 1301</th>
<th>Composition I</th>
<th>3</th>
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<tbody>
<tr>
<td></td>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
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<td></td>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>SCIT 1407</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
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<tr>
<td></td>
<td>HITT 1205</td>
<td>Medical Terminology</td>
<td>2</td>
</tr>
<tr>
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<td>16</td>
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| SEMESTER II        | SCIT 1408 | Human Anatomy and Physiology II    | 4 |
|--------------------| MDCA 1402 | Human Disease/Pathophysiology      | 4 |
|                    | HITT 1401 | Health Data Content and Structure  | 4 |
|                    | HITT 1441 | Coding and Classification Systems  | 4 |
|                    | HITT 2231 | Medical Terminology-Advanced       | 2 |
|                    |           |                                    | 18|

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<th>HITT 1160</th>
<th>Clinical - Health Information Technology/Technician</th>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>HITT 2335</th>
<th>Coding and Reimbursement Methodologies</th>
<th>3</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER V</th>
<th>HITT 1161</th>
<th>Clinical - Health Information Technology/Technician</th>
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</thead>
<tbody>
<tr>
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</table>

Minimum Hours Required..................................39
### HOSPITALITY MANAGEMENT

North Lake only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.HOTEL.MOTEL

The Hospitality Management Program is designed to train individuals for an entry-level management position within the Hotel/Motel industry related to the operations and management of hotels and motels. This two-year program emphasizes front office management, housekeeping management, and the operation, marketing, and sales of hotel/motel services and facilities.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</table>

### SEMESTER I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAMG 1321</td>
<td>Introduction to Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>BMGT 1303</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra OR (4)</td>
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<tr>
<td>TECM 1341</td>
<td>Technical Algebra AND</td>
<td>3</td>
</tr>
<tr>
<td>+Elective</td>
<td>Natural Science</td>
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16-20 hours

### SEMESTER II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HAMG 1313</td>
<td>Front Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2307</td>
<td>Hospitality Marketing and Sales</td>
<td>3</td>
</tr>
<tr>
<td>BMGT 1301</td>
<td>Supervision</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>+Elective</td>
<td>Social/Behavioral Science</td>
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15 hours

### SEMESTER III

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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACCT 2301</td>
<td>Principles of Accounting I OR</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2401</td>
<td>Principles of Accounting I (4)</td>
<td></td>
</tr>
<tr>
<td>HAMG 2301</td>
<td>Principles of Food and Beverage Operations</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2337</td>
<td>Hospitality Facilities Management</td>
<td>3</td>
</tr>
<tr>
<td>+++Elective</td>
<td>Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>+++Elective</td>
<td>Humanities/Fine Arts</td>
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</table>

15-4 hours

### SEMESTER IV

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>HAMG 1324</td>
<td>Hospitality Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1340</td>
<td>Hospitality Legal Issues</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1381</td>
<td>Cooperative Education–Hospitality Administration and Management</td>
<td>3</td>
</tr>
<tr>
<td>+++Elective</td>
<td>Hospitality Management</td>
<td>6</td>
</tr>
</tbody>
</table>

Minimum Hours Required ............................................. 61-67

+Elective- Natural Science elective must be selected from the DCCCD approved list of courses.

+++Elective–Social/Behavioral Science elective must be selected from any Social/Behavioral Science course approved for offering by the DCCCD.

+++Elective–Humanities/Fine Arts elective must be selected from any Humanities/Fine Arts course approved for offering by the DCCCD.

+++Elective–Hospitality Management electives must be selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRMO 1301</td>
<td>Hospitality Advertising</td>
<td>3</td>
</tr>
<tr>
<td>HRMO 1303</td>
<td>Hospitality Industry Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1305</td>
<td>Principles of Tourism Management</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1311</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1317</td>
<td>Recreational Services</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1319</td>
<td>Computers in Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1342</td>
<td>Guest Room Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1381</td>
<td>Cooperative Education–Hospitality Administration and Management</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1391</td>
<td>Special Topics in Hospitality Administration and Management</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2305</td>
<td>Hospitality Management and Leadership</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2330</td>
<td>Convention and Group Management and Services</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2332</td>
<td>Hospitality Financial Management</td>
<td>3</td>
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</tbody>
</table>

210
TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Hospitality Management and provides the student advanced skills required by the industry to specialize in Hospitality Management.

HOSPITALITY MANAGEMENT

*North Lake only*

(Student pursuing this certificate program are required to meet all TASP requirements)

Degree Plan Code: ES.HOTEL.MOTEL

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAMG 1321 Introduction to Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1313 Front Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1401 Introduction to Computers</td>
<td>4</td>
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</tbody>
</table>

Minimum Hours Required 10

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
**HOSPITALITY MANAGEMENT**

*North Lake only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.HOTEL.MOTEL.MGT

The Hospitality Management Certificate option is designed to train individuals for an entry-level management position within the Hotel/Motel industry related to the operations and management of hotels and motels. This Certificate allows the student to focus their studies on either front office management or housekeeping management.

**CREDIT HOURS**

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HAMG 1321</td>
<td>Introduction to Hospitality Industry</td>
<td>3</td>
</tr>
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<td>BMGT 1303</td>
<td>Principles of Management</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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**SEMESTER II**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>HAMG 1313</td>
<td>Front Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2301</td>
<td>Principles of Food and Beverage Operations</td>
<td>3</td>
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<td>HAMG 2337</td>
<td>Hospitality Facilities Management</td>
<td>3</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communications</td>
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**SEMESTER III**

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<th>Course Title</th>
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<tr>
<td>HAMG 1381</td>
<td>Cooperative Education-Hospitality Administration and Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2301</td>
<td>Principles of Accounting I OR</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2401</td>
<td>Principles of Accounting I</td>
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<tr>
<td>+Elective</td>
<td>Hospitality Management</td>
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</table>

Minimum Hours Required ........................................... 37-38

+Elective—Hospitality Management electives must be selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>HAMG 1305</td>
<td>Principles of Tourism Management</td>
<td>3</td>
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<tr>
<td>HAMG 1311</td>
<td>Sanitation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1317</td>
<td>Recreational Services</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1319</td>
<td>Computers in Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 1324</td>
<td>Hospitality Human Resource Management</td>
<td>3</td>
</tr>
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<td>HAMG 1340</td>
<td>Hospitality Legal Issues</td>
<td>3</td>
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<tr>
<td>HAMG 1342</td>
<td>Guest Room Maintenance</td>
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<td>HAMG 1391</td>
<td>Special Topics in Hospitality Administration and Management</td>
<td>3</td>
</tr>
<tr>
<td>HAMG 2305</td>
<td>Hospitality Management and Leadership</td>
<td>3</td>
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<td>HAMG 2307</td>
<td>Hospitality Marketing and Sales</td>
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<td>HAMG 2330</td>
<td>Convention and Group Management and Services</td>
<td>3</td>
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<tr>
<td>HAMG 2332</td>
<td>Hospitality Financial Management</td>
<td>3</td>
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<tr>
<td>HRMO 1301</td>
<td>Hospitality Advertising</td>
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</tr>
<tr>
<td>HRMO 1303</td>
<td>Hospitality Industry Sales Promotion</td>
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</table>
INTERIOR DESIGN

El Centro only

(Associate in Applied Science Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.INTERIOR.DESIGN

The Interior Design Department offers a 2-year Associate in Applied Sciences Degree in Interior Design. In addition a 15-hour Enhanced Skills Certificate in the third year provides the student with a Professional Certificate in Interior Design.

An Interior Designer is an individual who identifies, researches, and creatively solves problems relating to the functions and aesthetics of the interior environment, including issues pertaining to life safety. The Interior Designer must possess specialized knowledge in interior construction, equipment, materials, furniture and building codes.

Formal training in Interior Design prepares the individual to begin work as a design assistant and to possibly progress to full professional status and independent practice. In order to be fully licensed as an Interior Designer by the State of Texas, one must have an appropriate combination of formal education and practical experience, and must also pass a formal examination administered by the National Council for Interior Design Qualification (NCIDQ).

CREDIT HOURS

SEMESTER I
INDS 1341 Color Theory and Application .......... 3
INDS 1301 Basic Elements of Design ............ 3
DFTG 1309 Basic Computer-Aided Drafting ..... 3
ARTS 1303 Survey of Art History OR ............ 3
ARTS 1304 Survey of Art History ............... (3)
ARTS 1316 Drawing I ................................ 3
SPCH 1311 Introduction to Speech
      Communication ................................ 3

Minimum Hours Required .................................. 72

+Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

SEMESTER II
INDS 2313 Residential Design I ................. 3
INDS 1319 Technical Drawing for Interior
      Designers ................................ 3
INDS 2321 Presentation Drawing .................... 3
ARCH 1302 History of Modern Architecture .... 3
ENGL 1301 Composition I .......................... 3
MATH 1324 Mathematics for Business
      and Economics I OR .......................... 3
MATH 1342 Introductory Statistics .................. (3)

Minimum Hours Required .................................. 18

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

SEMESTER III
INDS 2335 Residential Design II .................. 3
INDS 2317 Rendering Techniques ........................ 3
INDS 2315 Lighting for Interior Designers ....... 3
INDS 1351 History of Interiors I .................... 3
+Elective Humanities /Fine Arts .................... 3
PSYC 2302 Applied Psychology ..................... 3

Minimum Hours Required .................................. 18

SEMESTER IV
INDS 1345 Commercial Design I .................. 3
ARCH 2312 Materials of Construction ............... 3
INDS 2307 Textiles for Interior Design .......... 3
INDS 1352 History of Interiors II ................. 3
INDS 2325 Professional Practices
      for Interior Designers ..................... 3
PHIL 2303 Logic OR ................................ 3
PHIL 2306 Ethics ................................... (3)

Minimum Hours Required .................................. 18

+Humanities/Fine Arts elective must be selected from the DCCCD approved course list.
TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Interior Design and provides the student advanced skills required by the industry to specialize in Interior Design.

INTERIOR DESIGN

El Centro only

(Students pursuing this certificate program are required to meet all TASP requirements)

Degree Plan Code: ES.INTERIOR.DESIGN

<table>
<thead>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>INDS 2331</td>
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<tr>
<td>ARCH 2371</td>
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<td>INDS 1391</td>
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<td>INDS 1491</td>
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<td>INDS 2280</td>
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</tbody>
</table>

Minimum Hours Required ........................................ 15

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.
INTERNATIONAL BUSINESS AND TRADE
Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.INTERNATIONAL.B

The International Business and Trade Program prepares students for entry-level employment in such positions as specialists in exporting and importing for the growing international trade community. Skills developed for the export and import of goods and services are presented in the context of the global economy and cross-cultural awareness. Emphasis is placed on the contribution of exports to the local, state, and national economies. Entrepreneurs, managers of firms with export potential, aspiring international agents, traders, brokers, customer sales and service representatives, transportation managers, product managers as well as documentation clerks, letters of credit specialists, export and/or import managers, and those engaged in global e-commerce may all benefit from Richland's international business and trade studies. A 24 credit Import-Export Certificate will expedite your entrance to the international arena.

CREDIT HOURS

SEMESTER I
IBUS 1305 Introduction To International Business and Trade ......................... 3
COSC 1401 Microcomputer Concepts and Applications OR ............................ 4
ITSC 1401 Introduction to Computers OR .................................. 4
POFI 1345 Integrated Software Applications II ....................................... (3)
BMGT 1303 Principles of Management .............................................. 3
MRKG 1311 Principles of Marketing .................................................. 3
ECON 2301 Principles of Economics I .............................................. 3
ENGL 1301 Composition I ............................................................... 3
...... 18-19

SEMESTER II
IBUS 1301 Principles of Imports-Exports I ......................................... 3
IBUS 1354 International Marketing Management ..................................... 3
IBUS 1349 International Information Systems ....................................... 3
ECON 2302 Principles of Economics II ............................................. 3
MATH 1324 Mathematics for Business and Economics OR ........................... 3
MATH 1342 Introductory Statistics ....................................................... 3
...... 15

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

SEMESTER III
IBUS 2301 Business Law ................................................................. 3
SPCH 1311 Introduction to Speech Communication ..................................... 3

SEMESTER IV
IBUS 1302 Principles of Imports-Exports II ...................................... 3
IBUS 2339 International Banking and Finance ....................................... 3
ACCT 2301 Principles of Accounting I OR ......................................... 3
ACCT 2401 Principles of Accounting I .............................................. (4)
HRPO 2307 Organizational Behavior .................................................... 3
+Elective ............................................................... 3
...... 15-16

SEMESTER V
IBUS 2335 International Business Law ........................................... 3
IBUS 2341 International Comparative Management .................................. 3
ACCT 2302 Principles of Accounting II OR ...................................... 3
ACCT 2402 Principles of Accounting II ............................................ (4)
+Elective OR 3
IBUS 2366 Practicum-International Business (3)
+++Elective Humanities/Fine Arts .................................................... 3
...... 15-16

Minimum Hours Required ................................................................. 69-72
+Elective—must be selected from the following:
ANTH 2351 Cultural Anthropology ......................................................... 3
GOVT 2371 Introduction to Comparative Politics .................................... 3
GEOG 2312 Economic Geography ...................................................... 3
GEOG 1302 Cultural Geography ......................................................... 3
HIST 2321 World Civilizations ............................................................. 3
HIST 2322 World Civilizations ............................................................. 3
PSYC 2301 Introduction to Psychology ................................................ 3
SOCI 1301 Introduction to Sociology .................................................. 3
RELI 1304 Major World Religions ..................................................... 3
+Recommended Electives
IBUS 2345 Import Customs Regulations .............................................. 3
IBUS 2351 International Purchasing .................................................... 3
IBUS 1351 Coordination in Multinational Industries ............................... 3
IBUS 1191 Special Topics in International Business AND ................................ 1
IBUS 1291 Special Topics in International Business ................................ 2
IBUS 1391 Special Topics in International Business ................................ 3
BUSI 1307 Personal Finance ............................................................... 3
ECON 2311 Economics of Global Issues .............................................. 3
BUSG 2309 Small Business Management ............................................. 3
BMGT 1301 Supervision ................................................................. 3
BMGT 2303 Problem solving and Decision-Making .................................. 3
HRPO 2301 Human Resources Management .......................................... 3
BMGT 1302 Principles of Retailing ...................................................... 3
BMGT 1333 Principles of Selling .......................................................... 3
BMGT 1349 Advertising and Sales Promotion ....................................... 3
+++Elective—Humanities/Fine Arts elective must be selected from the DCCCD approved course list.
A student cannot take more than (3) Special Topics course/s toward the degree.

215
INTERNATIONAL BUSINESS AND TRADE

Richland only

(Skills Achievement Award)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: SA.IBTR.BUS/TRADE

The following Skill Achievement Award for the Associate in Applied Sciences Degree in International Business and Trade provide specific skills in language training recommended by business and industry. Certificates in Chinese, French, German, Italian, Japanese, Portuguese, and Spanish are available.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning language course I</td>
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</tr>
<tr>
<td>Beginning language course II</td>
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<tr>
<td>Intermediate language I</td>
<td>3</td>
</tr>
<tr>
<td>Intermediate language II</td>
<td>3</td>
</tr>
<tr>
<td>Minimum Hours Required</td>
<td>14</td>
</tr>
</tbody>
</table>

NOTE: SPAN 2371, Spanish for Business I (3), or SPAN 2372, Spanish for Business II (3), may be substituted for SPAN 2312 in the Skills Achievement Award for Spanish.

SEMINATR HOURS

INTERNATIONAL BUSINESS AND TRADE

Richland only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.IBTR.BUS/TRADE

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>IBUS 1301</td>
<td>Principles of Imports-Exports I</td>
</tr>
<tr>
<td>IBUS 1305</td>
<td>Introduction to International Business and Trade</td>
</tr>
<tr>
<td>IBUS 1349</td>
<td>International Information Systems</td>
</tr>
<tr>
<td>IBUS 1354</td>
<td>International Marketing Management</td>
</tr>
<tr>
<td>POFI 1345</td>
<td>Integrated Software Applications I</td>
</tr>
<tr>
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<td>15</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBUS 1302</td>
<td>Principles of Imports-Exports II</td>
</tr>
<tr>
<td>IBUS 2335</td>
<td>International Business Law</td>
</tr>
<tr>
<td>IBUS 2339</td>
<td>International Banking and Finance</td>
</tr>
<tr>
<td>IBUS 2341</td>
<td>International Comparative Management</td>
</tr>
<tr>
<td>+Elective OR</td>
<td>3</td>
</tr>
<tr>
<td>IBUS 2366</td>
<td>Practicum-International Business</td>
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</table>

Minimum Hours Required | 30 |

+Recommended Electives:

<table>
<thead>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>IBUS 1341</td>
</tr>
<tr>
<td>IBUS 1351</td>
</tr>
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<td>IBUS 2331</td>
</tr>
<tr>
<td>IBUS 2345</td>
</tr>
<tr>
<td>IBUS 1191</td>
</tr>
<tr>
<td>IBUS 1291</td>
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<tr>
<td>IBUS 1391</td>
</tr>
<tr>
<td>BUSI 2301</td>
</tr>
<tr>
<td>ECON 2301</td>
</tr>
<tr>
<td>ECON 2302</td>
</tr>
</tbody>
</table>

A student cannot take more than a total of three (3) credit hours of Special Topics toward the Certificate.

216
INTERPRETER TRAINING PROGRAM

Eastfield only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.INTERPRETER.TR

The major in Interpreter Training is designed to prepare hearing students to work as professional interpreters with deaf and hearing consumers. During the two-year curriculum, students gain knowledge about the field of American Sign Language interpreting, deafness and American Deaf Culture, the skill to produce American Sign Language and then the skill to interpret between American Sign Language and English.

Entry into this program requires the following:

1. Meeting the entry requirements as established by Eastfield College.

2. Completion of the following courses with a grade of "B" or better.

   ENGL 1301 Composition I
   SLNG 1111 Fingerspelling
   SLNG 1404 American Sign Language (ASL): Beginning I
   SLNG 1405 American Sign Language (ASL): Beginning II

3. Advisement with the Director of the Interpreter Training Program.

Students are being prepared for Certification testing either at the National or State level so that they can seek gainful employment as Certified American Sign Language interpreters. To assist in meeting this goal, students are expected to maintain a "C" or better in all their course work.

---

**CREDIT HOURS**

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLNG 1315</td>
<td>3</td>
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<tr>
<td>SLNG 1317</td>
<td>3</td>
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<tr>
<td>SLNG 1444</td>
<td>4</td>
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<tr>
<td>ENGL 1302</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>3</td>
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</table>

**SEMESTER II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SLNG 1321</td>
<td>3</td>
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<tr>
<td>SLNG 1347</td>
<td>3</td>
</tr>
<tr>
<td>SLNG 1445</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>3</td>
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<tr>
<td>MATH 1314</td>
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<td>MATH 1414</td>
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<td>MATH 1332</td>
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**SEMESTER III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SLNG 2301</td>
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<tr>
<td>SLNG 2302</td>
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</tr>
<tr>
<td>SLNG 2411</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 1342</td>
<td>3</td>
</tr>
<tr>
<td>+Elective</td>
<td>3-4</td>
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**SEMESTER IV**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SLNG 2371</td>
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<tr>
<td>SLNG 2372</td>
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</tr>
<tr>
<td>SLNG 2388</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1406</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 1408</td>
<td>13</td>
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Minimum Hours Required ........................................61-63

+Elective – must be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ARTS 1301</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>3</td>
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<tr>
<td>PHIL 1301</td>
<td>3</td>
</tr>
<tr>
<td>SPOKEN LANGUAGE (i.e. German, Japanese, Spanish)</td>
<td>4</td>
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</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
INTERPRETER TRAINING PROGRAM
--DEAF STUDIES

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.INTERPRETER.DEAF

The Deaf Studies certificate is a one year course of study. It is designed to provide the student with basic sign language skills for the purpose of communication and information about deafness and Deaf culture. Individuals who work in jobs which brings them in contact with deaf individuals would find these courses very beneficial.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
<td></td>
</tr>
<tr>
<td>SLNG 1111</td>
<td>Fingerspelling</td>
</tr>
<tr>
<td>SLNG 1317</td>
<td>Introduction to the Deaf</td>
</tr>
<tr>
<td>SLNG 1404</td>
<td>American Sign Language (ASL): Beginning I</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<tr>
<td></td>
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</table>

| SEMESTER II | |
| SLNG 1315 | Visual/Gestural Communication | 3 |
| SLNG 1347 | Deaf Culture | 3 |
| SLNG 1405 | American Sign Language (ASL): Beginning II | 4 |
| ENGL 1302 | Composition II | 3 |
| PSYC 2301 | Introduction to Psychology | 3 |
| | 16 |

Minimum Hours Required ..............................................30
INVASIVE CARDIOVASCULAR TECHNOLOGY

EI Centro only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.INV.CARDIO.TECH

The EI Centro Invasive Cardiovascular Technology program is a two-year Associate degree program. The intensive didactic and clinical training program prepares the graduate for employment in the medical specialty of invasive cardiovascular technology as an invasive cardiovascular technologist.

Invasive Cardiovascular Technology students study the theory of techniques used in diagnosis, treatment, and follow-up of cardiovascular disease in humans.

Invasive cardiovascular technologists work in cardiac catheterization laboratories. They assist the cardiologist in performing intracardiac pressure and electrical measurements, oximetry determination, angiocardiology, and measurement/calculation of cardiac function indices. The technologist assists in all phases of the cardiac catheterization including catheter insertion, operation of the electronic instruments, and calculation of the cardiac data used by the physician in confirming diagnosis and designing treatment for the cardiac patient.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point of 2.85 or better, and completion of all requirements for admissions as a full-time student to the College. Applicants are rank-ordered for admission based on the grade point earned on prerequisite courses, interviews and letters of recommendation. Contact the Assessment Center at EI Centro College to sign up for the assessment tests, and Health Occupational Admissions, to receive an information packet.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208; Telephone number 312-553-9355) in cooperation with the Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT, 9111 Old Georgetown Road, Bethesda, Maryland 20814-1699; Telephone number 301-493-2334).

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>HPRS 1204</td>
<td>Basic Health Professions Skills 2</td>
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<td>HPRS 1202</td>
<td>Wellness and Health Promotion 2</td>
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<tr>
<td>HPRS 2231</td>
<td>General Health Professions Management 2</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition 3</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR 3</td>
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<tr>
<td>MATH 1414</td>
<td>College Algebra 4</td>
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<tr>
<td>BIOL 1470</td>
<td>Introduction to Human Anatomy and Physiology OR 4</td>
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<td>BIOL 2401</td>
<td>Anatomy and Physiology I 4</td>
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<table>
<thead>
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<th>SEMESTER II</th>
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<tr>
<td>HPRS 2300</td>
<td>Pharmacology for Health Professions 3</td>
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<tr>
<td>HPRS 1291</td>
<td>Special Topics in Health Professions, Other 2</td>
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<tr>
<td>HPRS 2201</td>
<td>Pathophysiology 2</td>
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<tr>
<td>BIOL 1472</td>
<td>Introduction to Human Anatomy and Physiology OR 4</td>
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<tr>
<td>BIOL 2402</td>
<td>Anatomy and Physiology II 4</td>
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<tr>
<td>PSYC 2301</td>
<td>Introduction to Psychology 3</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication 3</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>CVTT 1313</td>
<td>Catheterization Lab Fundamentals I 3</td>
</tr>
<tr>
<td>CVTT 1304</td>
<td>Cardiovascular Physiology 3</td>
</tr>
<tr>
<td>CVTT 1360</td>
<td>Clinical – Cardiovascular Technology 3</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>CVTT 1324</td>
<td>Cardiovascular Physiology II 3</td>
</tr>
<tr>
<td>CVTT 1110</td>
<td>Cardiac Catheterization I 1</td>
</tr>
<tr>
<td>CVTT 1350</td>
<td>Cardiac Catheterization II 3</td>
</tr>
<tr>
<td>CVTT 1153</td>
<td>Catheterization Lab Fundamentals II 1</td>
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<tr>
<td>CVTT 2460</td>
<td>Clinical – Cardiovascular Technology 4</td>
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<th>SEMESTER V</th>
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<tr>
<td>CVTT 2350</td>
<td>Cardiac Catheterization III 3</td>
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<tr>
<td>CVTT 1491</td>
<td>Special Topics in Cardiovascular Technology/Technician 4</td>
</tr>
<tr>
<td>CVTT 2463</td>
<td>Clinical – Cardiovascular Technology 4</td>
</tr>
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</table>

Minimum Hours Required: 68-69

+Elective - may be selected from the following:

| ARTS 1301    | Art Appreciation 3 |
| DRAM 1310    | Introduction to the Theatre 3 |
| HUMA 1301    | Introduction to Humanities 3 |
| MUSI 1306    | Music Appreciation 3 |
| PHIL 1301    | Introduction to Philosophy 3 |

219
INVASIVE CARDIOVASCULAR TECHNOLOGY

'El Centro only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.CVT.INV.CARDIO

The Invasive Cardiovascular Technology Certificate Option is for a student having at least a previous Associate Degree in a designated allied health field or a B.S. degree with a major in a science discipline. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology and math and physics. A background in basic ECGs and pharmacology is also required, which may be verified by either college-level coursework or job skills tested by examination. Basic ECG and pharmacology examinations will be available through the El Centro Assessment Center by special request. A minimum passing grade of 70% is required on the appropriate test(s) and exam results must be included with program applications materials submitted to the Health Occupations Admissions Office prior to the application deadline. If minimum score(s) are not achieved, the applicant can enroll in and complete the appropriate course(s). Upon completion of the Invasive Cardiovascular Technology program. A certificate will be awarded.

Invasive Cardiovascular Technology students study the theory of techniques used in diagnosis, treatment, and follow-up of cardiovascular disease in humans. Invasive Cardiovascular technologists work in cardiac catheterization laboratories. They assist the cardiologist in performing intracardiac pressure and electrical measurements, oximetry determination, angiocardigraphy, and measurement/calculation of cardiac function indices. The technologist assists in all phases of the cardiac catheterization, including catheter insertion, operation of the electronic instruments, and calculation of the cardiac data used by the physician in confirming diagnosis and designing treatment for the cardiac patient.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point of 2.85 or higher, completion of all requirements for admissions as a full-time student to college. Applicants are rank-ordered for admission based on grade point earned on prerequisite courses, interviews, and recommendation letters. Contact the Assessment Center at El Centro college to sign up for the assessment tests, and Health Occupations Admissions to receive an information packet.

<table>
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<th>CREDIT HOURS</th>
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<tr>
<td>PREREQUISITIES</td>
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<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
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<tr>
<td>ENGL 1301 Composition</td>
</tr>
<tr>
<td>MATH 1314 College Algebra OR</td>
</tr>
<tr>
<td>MATH 1414 College Algebra</td>
</tr>
<tr>
<td>9-10</td>
</tr>
</tbody>
</table>

**SEMESTER I**

| CVTT 1313 Catheterization Lab Fundamentals | 3 |
| CVTT 1304 Cardiovascular Physiology | 3 |
| CVTT 1360 Clinical - Cardiovascular Technology | 3 |
| 9 |

**SEMESTER II**

| CVTT 1324 Cardiovascular Physiology II | 3 |
| CVTT 1110 Cardiac Catheterization I | 1 |
| CVTT 1350 Cardiac Catheterization II | 3 |
| CVTT 1153 Catheterization Lab Fundamentals | 1 |
| CVTT 2460 Clinical - Cardiovascular Technology | 4 |
| 12 |

**SEMESTER III**

| CVTT 2350 Cardiac Catheterization III | 3 |
| CVTT 1491 Special Topics in Cardiovascular Technology/Technician | 4 |
| CVTT 2463 Clinical - Cardiovascular Technology | 4 |
| 11 |

Minimum Hours Required: 41-42

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
MANAGEMENT

Offered at all seven campuses

(Degree Plan Code: AAS.MANAGEMENT)

The Management Program provides an opportunity for students to acquire knowledge in the management field and at the same time update and sharpen personal management skills. In addition to learning about supervision, personnel management, human relations psychology, problem-solving, decision-making, and other related business topics, students also participate in an on-the-job management-training course with their present employers. These management training courses at work allow students to apply what is learned in the classroom environment and obtain the valuable practical experience necessary to become competent business managers. The Management Program allows students the opportunity to bridge the gap between theory and practice as professional managers. This degree program provides an external learning experience and/or capstone experience.

<table>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
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<tr>
<td>BMGT 1301 Supervision ........................................ 3</td>
</tr>
<tr>
<td>BMGT 1382 Cooperative Education-Business Administration and Management, General ........................................ 3</td>
</tr>
<tr>
<td>BMGT 1303 Principles of Management ........................................ 3</td>
</tr>
<tr>
<td>BUSI 1301 Introduction to Business ........................................ 3</td>
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<td>ENGL 1301 Composition I ........................................ 3</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication ......................... 3</td>
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| SEMESTER II         |
| HRPO 2301 Human Resources Management ........................................ 3 |
| BMGT 2382 Cooperative Education-Business Administration and Management, General ........................................ 3 |
| CISC 1470 Introduction to Computer Concepts and Applications ................ 4 |
| ENGL 1302 Composition II ........................................ 3-4 |
| Mathematics* ........................................ 3-4 |
| 16-17              |

| SEMESTER III        |
| HRPO 2307 Organizational Behavior ........................................ 3 |
| BMGT 2382 Cooperative Education-Business Administration and Management, General ........................................ 3 |
| ACCT 2301 Principles of Accounting I ** OR ........................................ 3 |
| ACCT 2401 Principles of Accounting I ** ........................................ (4) |
| ECON 2301 Principles of Economics I OR ........................................ 3 |
| ECON 1303 Principles of Contemporary Social Issues ........................................ 3 |
| 12-13              |

| SEMESTER IV         |
| BMGT 2303 Problem Solving and Decision Making ........................................ 3 |
| BMGT 2383 Cooperative Education-Business Administration and Management, General ........................................ 3 |
| +Elective Humanities/Fine Arts ........................................ 3 |
| Elective Any Non-MGMT Course ........................................ 3 |
| Elective ........................................ 3 |
| 15                |

Minimum Hours Required ........................................ 61-63

+Electives—may be selected from the following:

| ARTS 1301 Art Appreciation ........................................ 3 |
| DRAM 1310 Introduction to the Theatre ........................................ 3 |
| ENGL 2322 British Literature ........................................ 3 |
| ENGL 2323 British Literature ........................................ 3 |
| ENGL 2327 American Literature ........................................ 3 |
| ENGL 2328 American Literature ........................................ 3 |
| ENGL 2332 World Literature ........................................ 3 |
| ENGL 2333 World Literature ........................................ 3 |
| HUMA 1301 Introduction to the Humanities ........................................ 3 |
| MUSI 1306 Music Appreciation ........................................ 3 |
| PHIL 1301 Introduction to Philosophy ........................................ 3 |
| Foreign Language or American Sign Language ........................................ 4 |

*Mathematics must be selected from the following:

| MATH 1314 College Algebra OR ........................................ 3 |
| MATH 1414 College Algebra ........................................ 4 |
| MATH 1324 Mathematics for Business and Economics I ........................................ 3 |
| MATH 1342 Introductory Statistics ........................................ 3 |
| MATH 1371 Business Mathematics ........................................ 3 |

MATH 1371 MUST BE ACCOMPANIED BY A COURSE IN NATURAL SCIENCE.

**Students may substitute ACNT 1303 and ACNT 1304. Only three hours may be applied to the required number of hours for granting the degree.

□ This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

221
MANAGEMENT

Offered at all seven campuses

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MGMT.MANAGEMENT

The Management program is designed to develop the fundamental skills, knowledge, attitudes and experiences which enable men and women to function in leadership and decision-making positions as managers. Students combine management classes and on-the-job management training with their present employers. All of the courses for this certificate are applicable to the Management associate degree option. This certificate program provides an external learning experience and/or capstone experience.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
</table>

**SEMESTER I**
- BMGT 1301 Supervision ........................................3
- BMGT 1382 Cooperative Education-Business
  Administration and Management, General ................................3
- ENGL 1301 Composition I ....................................3

**SEMESTER II**
- HRPO 2301 Human Resources Management .................3
- BMGT 1383 Cooperative Education-Business
  Administration and Management, General .........................3
- SPCH 1311 Introduction to Speech
  Communication .............................................3

| SEMESTER III | BMGT 2307 Organizational Behavior ..................3
|--------------|-----------------------------------------------|
|              | BMGT 2382 Cooperative Education-Business
|              | Administration and Management, General ..........3
|              | HRPO 2307 Organizational Behavior ..................3
|              | BMGT 2382 Cooperative Education-Business
|              | Administration and Management, General ..........3

**SEMESTER IV**
- BMGT 2303 Problem Solving and Decision
  Making ..................................................3
- BMGT 2383 Cooperative Education-Business
  Administration and Management, General .........................3

Minimum Hours Required ........................................30
MARKETING CAREERS -- BUSINESS MARKETING

Brookhaven and Cedar Valley only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.MRKT.BUSINESS

The Business Marketing program provides an opportunity for students to acquire knowledge and training for careers in sales and marketing. In addition to a broad program of study encompassing all phases of marketing, students apply what is learned in the classroom to real-life situations in the business sector. Cooperative work experience provides students with the necessary skills to become competent in the industry.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>BMGT 1302 Principles of Retailing</td>
</tr>
<tr>
<td>BMGT 1303 Principles of Management</td>
</tr>
<tr>
<td>BUSI 1301 Introduction to Business</td>
</tr>
<tr>
<td>ENGL 1301 Composition I</td>
</tr>
<tr>
<td>+Elective Humanities/Fine Arts</td>
</tr>
<tr>
<td>Elective Any Non-MRKG and Non-BMGT course</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| SEMESTER II |
| BMGT 1333 Principles of Selling | 3 |
| ECON 2301 Principles of Economics I | 3 |
| ENGL 1302 Composition II | 3 |
| MATH 1324 Mathematics for Business and Economics I OR | 3 |
| POFT 1321 Business Math AND | 3 |
| +Elective Lab Science | 3-4 |
| SPCH 1311 Introduction to Speech Communication | 3 |
| | 15-19 |

| SEMESTER III |
| MRKG 1311 Principles of Marketing | 3 |
| ITSC 1401 Introduction to Computers | 4 |
| MRKG 1381 Cooperative Education - Business Marketing | 3 |
| MRKG 1366 Practicum (or Field Experience) - Business Marketing and Marketing Management | 3 |
| ACCT 2301 Principles of Accounting I OR | 3 |
| ACCT 2401 Principles of Accounting I OR | 3 |
| ACNT 1303 Introduction to Accounting I | 3 |
| PSYC 2302 Applied Psychology | 3 |
| | 16 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

| SEMESTER IV |
| BMGT 1349 Advertising and Sales Promotion | 3 |
| BMGT 1371 Customer Service | 3 |
| MRKG 2381 Cooperative Education - Business Marketing and Marketing Management OR | 3 |
| MRKG 2366 Practicum (or Field Experience) - Business Marketing and Marketing Management | 3 |
| ECON 2302 Principles of Economics II | 3 |
| HRPO 2307 Organizational Behavior | 3 |
| HRPO 2301 Human Resource Management | 3 |
| | 18 |

Minimum Hours Required | 67-71 |

+Elective - may be selected from the following:

| Course |
| ARTS 1301 | Art Appreciation |
| DRAM 1310 | Introduction to Theatre |
| HUMA 1301 | Introduction to the Humanities |
| MUSI 1306 | Music Appreciation |
| PHIL 1301 | Introduction to Philosophy |

++Lab Science elective must be selected from the DCCCD approved course list.
TECH-PREP ENHANCED SKILLS CERTIFICATES

This Enhanced Skills Certificate is attached to the Marketing Careers--Business Marketing Associate Degree and provides the student advanced skills required by the industry to specialize in Department Management.

DEPARTMENT MANAGER

Brookhaven and Cedar Valley only

(Students pursuing this certificate program are required to meet all TASP requirements)

Degree Plan Code: ES.MRKT.B/M.DEPT.MGR

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>BMGT 1301 Supervision</td>
<td>3</td>
</tr>
<tr>
<td>POFT 2312 Business Comm.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Minimum Hours Required .................................................. 6

This is a Tech Prep Program. Students interested in pursuing a Tech Prep enhanced skills certificate need to consult with their advisor.

MARKETING CAREERS -- BUSINESS MARKETING--RETAIL/WHOLESALE BUSINESS SPECIALIST

Brookhaven and Cedar Valley only

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.MRKT.RTL/WHOLESALE

This certificate program will prepare students for entry level retail or wholesale employment with a focus on communications, selling techniques, and customer service.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMGT 1302 Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>BMGT 1333 Principles of Selling</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>POFT 1321 Business Math</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>12</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRKG 1381 Cooperative Education -- Business Marketing</td>
<td>3</td>
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<tr>
<td>MRKG 1366 Practicum (or Field Experience) -- Business Marketing and Marketing Management</td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>BMGT 1371 Customer Service</td>
<td>3</td>
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</tbody>
</table>

Minimum Hours Required .................................................. 18
MARKETING CAREERS – BUSINESS MARKETING—CUSTOMER SERVICE REPRESENTATIVE

Brookhaven and Cedar Valley only

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MRKT.CUSTOMER

This certificate program is designed to prepare students for marketing career opportunities in all areas of customer service.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>MRKG 1311</td>
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<tr>
<td>BMGT 1303</td>
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<tr>
<td>BUSI 1301</td>
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<td>SPCH 1311</td>
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<td>PSYC 2302</td>
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<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>BMGT 1333</td>
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<td>BMGT 1371</td>
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<tr>
<td>ITSC 1401</td>
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<td>HRPO 2307</td>
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<tr>
<td>ENGL 1301</td>
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<tr>
<td>SEMESTER III</td>
</tr>
<tr>
<td>MRKG 1381</td>
</tr>
<tr>
<td>MRKG 1366</td>
</tr>
<tr>
<td>BMGT 1391</td>
</tr>
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<tr>
<td>Minimum Hours Required .......... 34</td>
</tr>
</tbody>
</table>

MARKETING CAREERS – BUSINESS MARKETING – CALL CENTER SPECIALIST

Brookhaven only

(Skills Achievement Award)

Degree Plan Code: SA.MRKT.CALL.CENTER

This sequence of courses will prepare students for entry-level employment in a call center environment by developing core proficiency in communications, computer literacy and customer service.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>POFI 1301</td>
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<tr>
<td>SPCH 1311</td>
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<tr>
<td>BMGT 1371</td>
</tr>
<tr>
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<tr>
<td>SEMESTER II</td>
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<tr>
<td>MRKG 1381</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Minimum Hours Required .......... 12</td>
</tr>
</tbody>
</table>

225
MARKETING CAREERS –
FASHION MARKETING

Brookhaven only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.MRKT.FASHION

This two-year program is designed for those interested in careers related to fashion wholesaling and retailing. Students explore merchandising, buying, textiles, display, advertising and computer applications in the fashion industry. Emphasis is placed on cooperative work experience which gives the student necessary preparation and experience needed for an entry-level position.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
<th>SEMESTER I</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BMGT 1302 Principles of Retailing 3</td>
</tr>
<tr>
<td></td>
<td>FSHD 1302 Introduction to Fashion 3</td>
</tr>
<tr>
<td></td>
<td>BUSI 1301 Introduction to Business 3</td>
</tr>
<tr>
<td></td>
<td>ENGL 1301 Composition I 3</td>
</tr>
<tr>
<td></td>
<td>MATH 1324 Mathematics for Business and Economics I OR 3</td>
</tr>
<tr>
<td></td>
<td>MATH 1371 Business Mathematics AND (3)</td>
</tr>
<tr>
<td></td>
<td>+Elective Lab Science 3-4</td>
</tr>
<tr>
<td></td>
<td>15-19</td>
</tr>
</tbody>
</table>

| SEMESTER II |
| BMGT 1333 Principles of Selling 3 |
| FSHDN 1342 Visual Merchandising 3 |
| FSHN 1301 Textiles 3 |
| PSYC 2302 Applied Psychology 3 |
| ENGL 1302 Composition II 3 |
| SPCH 1311 Introduction to Speech Communication 3 |
| 18 |

| SEMESTER III |
| MRKG 1311 Principles of Marketing 3 |
| ITSC 1401 Introduction to Computers 4 |
| FSHN 1308 Fashion Trends 3 |
| FSHN 1212 Apparel and Accessories Marketing Operations 2 |
| FSHN 1382 Cooperative Education – Fashion Merchandising OR 3 |
| FSHN 1366 Practicum (or Field Experience) – Fashion Merchandising (3) |
| 15 |

Minimum Hours Required: 71

+Electives - may be selected from the following:

| BUSI 2301 Business Law 3 |
| BMGT 1303 Principles of Management 3 |
| BMGT 1349 Advertising and Sales Promotion 3 |
| ECON 1303 Economics of Contemporary Social Issues 3 |
| ECON 2301 Principles of Economics I 3 |
| ECON 2302 Principles of Economics II 3 |
| FSHD 1233 Fashion Study Tour 2 |
| FSHDN 1318 Apparel Computer Systems 3 |
| FSHDN 2310 Fabric Design 3 |
| FSHN 1191 Special Topics in Apparel and Accessories Marketing Operations, General 3 |
| FSHN 1291 Special Topics in Apparel and Accessories Marketing Operations, General 3 |
| HRPO 2307 Organizational Behavior 3 |
| ++Lab Science elective must be selected from the DCCCD approved course list. |

☐ This course has been or will be revised effective, Fall 2000.

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
TECH PREP ENHANCED SKILLS CERTIFICATE

This Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Marketing Careers--Fashion Marketing and provides the student advanced skills required by the industry to specialize in Department Management.

DEPARTMENT MANAGER

Brookhaven only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.MRKT.F/M.DEPT.MGR

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>BMGT 1301 Supervision       3</td>
</tr>
<tr>
<td>POFT 2312 Business Communications II 3</td>
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</tr>
</tbody>
</table>

Minimum Hours Required ................................................. 6

MARKETING CAREERS

FASHION MARKETING -- VISUAL MERCHANDISING ASSISTANT

Brookhaven only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MRKT.VISUAL

This certificate program is designed to prepare students for career opportunities as retail merchandise coordinators and visual display associates in a variety of fashion settings.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>FSHD 1302 Introduction to Fashion ..........3</td>
</tr>
<tr>
<td>FSHD 1308 Fashion Trends .......................3</td>
</tr>
<tr>
<td>BMGT 1349 Advertising and Sales Promotion ........................................... 3</td>
</tr>
<tr>
<td>ARTC 1305 Basic Graphic Design ............3</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication ........................................... 3</td>
</tr>
<tr>
<td>15</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEMESTER II</td>
</tr>
<tr>
<td>FSHN 1342 Visual Merchandising ............3</td>
</tr>
<tr>
<td>ARTC 2305 Digital Painting and Imaging ............3</td>
</tr>
<tr>
<td>GRPH 1359 Object Oriented Computer Graphics ........................................... 3</td>
</tr>
<tr>
<td>MATH 1371 Business Mathematics ............3</td>
</tr>
<tr>
<td>FSHN 1382 Cooperative Education -- Fashion Merchandising OR ..........3</td>
</tr>
<tr>
<td>FSHN 1366 Practicum (or Field Experience) – Fashion Merchandising ..........(3)</td>
</tr>
<tr>
<td>15</td>
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</tbody>
</table>

Minimum Hours Required ................................................. 30

☐ This course has been or will be revised effective, Fall 2000.
MEDICAL ASSISTING

El Centro and Mountain View only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MEDA.ASSISTING

This 12-month program is designed to prepare individuals to perform the duties of a medical assistant who can function in an acute care clinical setting or physician's office in the areas of: medical office administration, clinical lab procedures, and examining room assisting. The student may elect to complete the program either as a block CEU program or as a credit certificate program.

The medical assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the Committee on Accreditation for Medical Assistant Education.

*aka Curriculum Review Board of the American Association of Medical Assistant's Endowment (AAMAE).

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th></th>
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<tbody>
<tr>
<td>MDCA 1313</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MDCA 1205</td>
<td>Medical Law and Ethics</td>
<td>2</td>
</tr>
<tr>
<td>MDCA 1201</td>
<td>Human Disease/Pathophysiology</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>SEMESTER II</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>MDCA 1421</td>
<td>Administrative Procedures</td>
<td>4</td>
</tr>
<tr>
<td>MRMT 1211</td>
<td>Computers in Health Care</td>
<td>2</td>
</tr>
<tr>
<td>MRMT 1192</td>
<td>Special Topics in Medical Transcription</td>
<td>1</td>
</tr>
<tr>
<td>MDCA 1443</td>
<td>Medical Insurance</td>
<td>4</td>
</tr>
<tr>
<td>MDCA 1247</td>
<td>Pharmacology and Administration of Medications</td>
<td>2</td>
</tr>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>MDCA 1216</td>
<td>Procedures in a Clinical Setting</td>
<td>2</td>
</tr>
<tr>
<td>MDCA 1251</td>
<td>Medical Assistant Laboratory Procedures</td>
<td>2</td>
</tr>
<tr>
<td>MDCA 1217</td>
<td>Procedures in a Clinical Setting</td>
<td>2</td>
</tr>
<tr>
<td>MDCA 2388</td>
<td>Internship - Medical Assistant</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Hours Required ............................................. 35
MEDICAL LABORATORY TECHNOLOGY

El Centro only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.MED.LAB.TECH

The Medical Laboratory Technology program prepares the student to perform tests and related duties in a medical laboratory. The program is a balanced curriculum of science, liberal arts, and technical courses including didactic and clinical education. The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS, 8410 West Bryn Mawr, Suite 670, Chicago, Illinois, 60631-3415: Telephone 773-714-8880).

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, rank ordering by grade point average earned on the two pre-requisite courses, and completion of all requirements for admission as a full-time student to the college. Contact the Assessment Center at El Centro College to sign up for the assessment tests and, Health Occupations Admissions, to receive an information packet.

Upon completion of the program, the student is awarded an Associate in Applied Sciences Degree and is qualified to take the Board of Registry for the American Society of Clinical Pathologists (ASCP).

CREDIT HOURS

PROGRAM PREREQUISITES
BIOL 2401 Anatomy and Physiology I OR.............4
BIOL 1470 Introduction to Human Anatomy
and Physiology..............................................(4)
ENGL 1301 Composition I................................3
7

SEMESTER I
BIOL 2402 Anatomy and Physiology II OR.............4
BIOL 1472 Introduction to Human Anatomy
and Physiology..............................................(4)
CHEM 1411 General Chemistry .......................4
HPRS 1204 Basic Health Profession Skills...........2
HPRS 2231 General Health Professions
Management..................................................2
HPRS 2201 Pathophysiology.............................2
HPRS 1202 Wellness and Health Promotion..........2
16

SEMESTER II
MATH 1314 College Algebra..............................3
CHEM 1412 General Chemistry .......................4
HPRS 1291 Special Topics in Health Professions
and Related Sciences, Other.........................2
SPCH 1311 Introduction to Speech
Communication..............................................3
BIOL 2420 General Microbiology ......................4
16

SEMESTER III
MLAB 1415 Hematology....................................4
MLAB 1167 Practicum (or Field Experience)-
Medical Laboratory
Technician/Assistant.......................................1
PSYC 2301 Introduction to Psychology..............3
+E Elective Humanities/Fine Arts....................3
11

SEMESTER IV
MLAB 2266 Practicum (or Field Experience)-
Medical Laboratory
Technician/Assistant.......................................2
MLAB 1335 Immunology/Serology......................3
MLAB 2501 (Clinical) Chemistry......................5
10

SEMESTER V
HPRS 2300 Pharmacology for Health
Professions................................................3
MLAB 2434 (Clinical) Microbiology..................4
MLAB 2331 Immunohematology.........................3
10

SEMESTER VI
MLAB 2267 Practicum (or Field Experience)-
Medical Laboratory
Technician/Assistant.......................................2
2

Minimum Hours Required..................................72

+Humanities/Fine Arts Elective- must be selected from the following:

ARTS 1301 Art Appreciation............................3
HUMA 1301 Introduction to Humanities.............3
MUSI 1306 Music Appreciation........................3
PHIL 1301 Introduction to Philosophy..............3
DRAM 1310 Introduction to Theater..................3

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
MEDICAL STAFF SERVICES

El Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.MED.STAFF.SVCS

The Medical Staff Services program includes a two-year, 64 credit hour curriculum. The program is designed to prepare individuals to perform duties of a Medical Staff Service Coordinator in health care settings, including hospitals, managed care organizations, and credentialing organizations.

A Medical Staff Services Coordinator provides credentialing and monitoring services for physicians and allied health professionals. Confidentiality and legal issues associated with accredited services of health care organizations, peer review and impaired physicians issues are included in the responsibilities of a Medical Staff Services Coordinator.

Upon completion of the program, graduates are eligible to sit for the National Association of Medical Staff Services (NAMSS) Certification Examination.

Admission requirements include attending an information session, satisfactory scores on pre-entrance assessment testing, completion of program prerequisite courses with a cumulative grade point average of 2.5 or better, and completion of all requirements for admission as a student to the college. Applicants are ranked according to grade point average earned on two prerequisite courses. Contact the Assessment Center at El Centro College to sign up for the pre-entrance assessment tests and Health Occupations Admissions to receive an information packet.

CREDIT
HOURS

PREREQUISITES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
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<tr>
<td>MATH 1342</td>
<td>Introductory Statistics*</td>
<td>3</td>
</tr>
<tr>
<td>HPRS 2231</td>
<td>General Health Professions Management</td>
<td>2</td>
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<table>
<thead>
<tr>
<th>Semester I</th>
</tr>
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<tbody>
<tr>
<td>BIOL 1470</td>
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<tr>
<td>ENGL 1301</td>
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<tr>
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<td>HPRS 1370</td>
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<th>Semester II</th>
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<tr>
<td>BIOL 1472</td>
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<td>SPCH 1311</td>
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<td>HPRS 2370</td>
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<td>MDCA 1202</td>
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<td>HPRS 1270</td>
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<tr>
<th>Semester III</th>
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<tbody>
<tr>
<td>POFI 1345</td>
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<td>BMGT 1303</td>
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<td>PSYC 2301</td>
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<tr>
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<tbody>
<tr>
<td>HPRS 2371</td>
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<tr>
<td>+Elective</td>
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<tr>
<td>HRPO 2307</td>
</tr>
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</table>

Minimum Hours Required: 61

*MATH 1414 College Algebra or MATH 1314 College Algebra may be substituted for MATH 1342 Introductory Statistics.

+Elective - may be selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>Introduction to the Theater</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
MEDICAL TRANSCRIPTION

El Centro Only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MEDT.TRANSCRIPT

The nine-month certificate program in Medical Transcription prepares the student to function as a medical typist or medical transcriptionist with a thorough knowledge of medical terminology, advanced typing, word processing skills, and work experience. Proper form, editing abilities, and legal implications are stressed. Entry requirement to this program is a typing skill of 50 words per minute. Job opportunities are available in medical records, pathology and radiology departments of hospitals and clinics; physician’s offices; the health insurance industry; public and private health foundations and institutions; medical schools; and research centers. Cooperative work experience is a part of this program.

Admission requirements include an information session, satisfactory scores on assessment tests and a typing test, rank ordering by grade point average, and meeting all requirements for admission as a full-time student. Call Health Occupations Admissions to receive an information packet.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tr>
<td>ENGL 1301</td>
<td>Composition I ........................................ 3</td>
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<tr>
<td>BIOL 1470</td>
<td>Introduction to Human Anatomy and Physiology ....... 4</td>
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<tr>
<td>MDCA 1313</td>
<td>Medical Terminology ................................... 3</td>
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<td>MRMT 1307</td>
<td>Medical Transcription Fundamentals .................. 3</td>
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<td>MDCA 1201</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication ................ 3</td>
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<td>BIOL 1472</td>
<td>Introduction to Human Anatomy and Physiology ....... 4</td>
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<tr>
<td>HITT 2331</td>
<td>Medical Terminology - Advanced ....................... 3</td>
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<td>MDCA 1202</td>
<td>Human Disease/Pathophysiology ....................... 2</td>
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<tr>
<td>MRMT 2433</td>
<td>Advanced Medical Transcription ...................... 4</td>
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<tr>
<td>MRMT 1382</td>
<td>Cooperative Education - Medical Transcription ........ 3</td>
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Minimum Hours Required ........................................ 38
**MORTGAGE BANKING DESIGNATE**

*North Lake only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MOBA.DESIGNATE

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<td>RELE 1325 Real Estate Mathematics AND</td>
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<td>ECOL 1305 People and Their Environment OR</td>
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<tr>
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<td>RELE 1324 Loan Origination and Quality Control</td>
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<tr>
<td>BNKG 1393 Special Topics in Banking and Financial Support Services</td>
<td>3</td>
</tr>
<tr>
<td>BNKG 1391 Special Topics in Banking and Financial Support Services</td>
<td>3</td>
</tr>
<tr>
<td>BNKG 1392 Special Topics in Banking and Financial Support Services</td>
<td>3</td>
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<tr>
<td>RELE 1301 Principles of Real Estate</td>
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<tr>
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<tr>
<td>BMGT 1303 Principles of Management OR</td>
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<tr>
<td>HRPO 2307 Organizational Behavior</td>
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<tr>
<td>BNKG 1381 Cooperative Education–Banking and Financial Support Services</td>
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</tr>
<tr>
<td>RELE 1319 Real Estate Finance</td>
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Minimum Hours Required: 33-36

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**MORTGAGE BANKING – INTERN**

*North Lake only*

(Skills Achievement Award)

Degree Plan Code: SA.MORTGAGE.BANK

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<thead>
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<tbody>
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<tr>
<td>BNKG 1391 Special Topics in Banking and Financial Support Services</td>
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</tr>
<tr>
<td>BNKG 1392 Special Topics in Banking and Financial Support Services</td>
<td>3</td>
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<tr>
<td>RELE 1319 Real Estate Finance</td>
<td>3</td>
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<tr>
<td>RELE 1324 Loan Origination and Quality Control</td>
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<tr>
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</table>

Minimum Hours Required: 15

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232
MORTGAGE BANKING

North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.MORTGAGE BANKING

This program is designed to develop the skills and knowledge necessary so that a graduate may advance in career paths appropriate to that person's own particular interests and abilities in the field of mortgage banking. In addition to the specific technical skills and knowledge required to originate, process and manage mortgage loans, the graduate will have covered skills in other areas such as real estate, planning and organization, problem solving and decision making, communication, accounting and business.

CREDIT HOURS

SEMESTER I
RELE 1301 Principles of Real Estate .......... 3
RELE 1319 Real Estate Finance .................. 3
BUSG 1301 Introduction to Business .......... 3
ENGL 1301 Composition I ...................... 3
RELE 1325 Real Estate Mathematics AND ...... 3
ECOL 1305 People and Their Environment OR .. 3
MATH 1324 Mathematics for Business and Economics .......... (3)

15-18

SEMESTER II
ITSC 1401 Introduction to Computers .......... 4
RELE 1324 Loan Origination and Quality
Control ........................................... 3
SPCH 1311 Introduction to Speech
Communication .................................... 3
ACCT 2301 Principles of Accounting I OR ...... 3
ACCT 2401 Principles of Accounting I .......... (4)
++Elective Humanities/Fine Arts .......... 3

16-17

SEMESTER III
BNKG 1353 Mortgage Lending .................... 3
BNKG 1391 Special Topics in Banking and Financial Support Services .......... 3
BNKG 1381 Cooperative Education – Banking and Financial Support Services .......... 3
BNKG 1358 Secondary Market .................... 3
++Elective ......................................... 3

15

SEMESTER IV
BNKG 1392 Special Topics in Banking and Financial Support Services .......... 3
ECON 2301 Principles of Economics I .......... 3
BMGT 1303 Principles of Management OR ...... 3
HRPO 2307 Organizational Behavior .......... (3)
GOVT 2301 American Government .......... 3
++Elective ......................................... 3

15

Minimum Hours Required ................................ 61-65

++Elective -- must be selected from the following:

ARTS 1301 Art Appreciation .......................... 3
DRAM 1310 Introduction to the Theater ............ 3
ENGL 2322 British Literature .................. 3
ENGL 2323 British Literature .................. 3
ENGL 2322 World Literature .................. 3
ENGL 2333 World Literature .................. 3
ENGL 2327 American Literature .......... 3
ENGL 2311 Technical Writing ................. 3
HIST 1301 History of the United States .......... 3
HIST 1302 History of the United States .......... 3
HUMA 1301 Introduction to the Humanities .......... 3
MUSI 1306 Music Appreciation .......... 3
PHIL 1301 Introduction to Philosophy .......... 3

++Electives -- must be selected from the following:

ACCT 2302 Principles of Accounting II ............ 3
ACCT 2402 Principles of Accounting II ............ 4
ECON 2302 Principles of Economics II .......... 3
BNKG 1393 Special Topics in Banking and Financial Support Services .......... 3
BNKG 1382 Cooperative Education – Banking and Financial Support Services .......... 3
SPCH 1315 Fundamentals of Public Speaking .......... 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
MULTIMEDIA TECHNOLOGY—MULTIMEDIA WEB DESIGN

Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.MULT.WEB.DESIGN

The Associates in Applied Sciences in Multimedia Web Design is designed to enable students to participate as creative and resourceful members of a web development team. Upon successful completion of this program, the student will be experienced in cross-platform development and editing of graphics, audio files, and animations for use on the Internet.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>IMED 1301 Introduction to Multimedia</td>
<td>3</td>
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<tr>
<td>IMED 1316 Web Page Design I</td>
<td>3</td>
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<tr>
<td>PHTC 1349 Photo Digital Imaging I</td>
<td>3</td>
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<tr>
<td>ENGL 1301 Composition I</td>
<td>3</td>
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<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
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<th>SEMESTER II</th>
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<tbody>
<tr>
<td>IMED 1351 Digital Video</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1345 Interactive Multimedia I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2315 Web Page Design II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2301 Introduction to Psychology OR</td>
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<tr>
<td>PSYC 2302 Applied Psychology</td>
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<tr>
<td>MATH 1332 College Mathematics I</td>
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<thead>
<tr>
<th>SEMESTER III</th>
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<tbody>
<tr>
<td>BUSI 1301 Introduction to Business</td>
<td>3</td>
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<tr>
<td>IMED 2313 Project Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>++Elective Humanities/Fine Arts</td>
<td>3</td>
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<tr>
<td>IMED 1341 2-D Interface Design</td>
<td>3</td>
</tr>
<tr>
<td>PHTC 2349 Photo Digital Imaging II</td>
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<tr>
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<tr>
<td>IMED 2311 Portfolio Development</td>
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<td>3-4</td>
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<tr>
<td>++Elective General Elective</td>
<td>3-4</td>
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<tr>
<td>IMED 2388 Internship-Educational/Instructional Media Technology/Technician</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1391 Special Topics in Educational/Instructional Media Technology/Technician</td>
<td>(3)</td>
</tr>
<tr>
<td>+++Elective Specialty Elective</td>
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<td>15-17</td>
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</tbody>
</table>

Minimum Hours Required: 60-62

*Elective - Humanities/Fine Arts elective may be selected from the following:

- ARTS 1301 Art Appreciation 3
- DRAM 1301 Introduction to Theatre 3
- HUMA 1301 Introduction to Humanities 3
- MUSI 1306 Music Appreciation 3
- PHIL 1301 Introduction to Philosophy 3

*Elective - General electives may be selected from the following:

- ENGL 2311 Technical Writing 3
- BUSG 2309 Small Business Management 3
- MUSI 1372 Digital Music Production 3
- Any ARTS, ARTC, CISC, COSC, HUMA, JOUR, IMED, or PHTC course 3-4

*Elective - Specialty elective may be selected from the following:

- IMED 2349 Internet Communications 3
- ITSE 2313 Web Authoring 3
- IMED 1305 Multimedia Authoring I 3
- IMED 2305 Multimedia Authoring II 3
- IMED 2345 Interactive Multimedia II 3
- IMED 2351 Multimedia Programming 3
- ARTC 1353 Computer Illustration 3
- ARTC 1345 3-D Modeling and Rendering 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
**MULTIMEDIA TECHNOLOGY - INTERNET COMMUNICATIONS**

*Richland only*

(Level I Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MULTINTERNET.I

The Internet Communications Certificate programs teach the design and development of web sites for corporate, commercial and educational uses. Special emphasis is placed on incorporating multimedia elements to develop dynamic web sites. In addition to learning advanced HTML and page layout techniques, students learn basic web server technology and client-side scripting. Classes also address networks, security, and legal issues as they relate to the Internet.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT</th>
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<tbody>
<tr>
<td>IMED 1301 Introduction to Multimedia</td>
<td>3</td>
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<td>IMED 1316 Web Page Design I</td>
<td>3</td>
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<tr>
<td>PHTC 1349 Photo Digital Imaging I</td>
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<tr>
<td>+General Education Requirement</td>
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<td>IMED 2315 Web Page Design II</td>
<td>3</td>
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<tr>
<td>+General Education Requirement</td>
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<tr>
<td>BUSI 1301 Introduction to Business</td>
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<tr>
<td>IMED 2349 Internet Communications</td>
<td>3</td>
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<td>IMED 2313 Project Analysis and Design</td>
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<td>IMED 1305 Multimedia Authoring I OR</td>
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Minimum Hours Required ................................................. 36-37

+General Education Requirement - Students must take two of the following courses:

| ENGL 1301 Composition I | 3 |
| SPCH 1311 Introduction to Speech Communication | 3 |
| MATH XXXX (Math course can be chosen from the following list): | |
| MATH 1314 College Algebra | 3 |
| MATH 1324 Mathematics for Business and Economics I | 3 |
| MATH 1332 College Mathematics I | 3 |
| MATH 1333 College Mathematics II | 3 |
| MATH 1342 Introductory Statistics | 3 |
| MATH 1414 College Algebra | 4 |
| MATH 2412 Precalculus Mathematics | 3 |
| OR higher level | |

++Elective may be selected from the DCCCD approved Humanities/Fine Arts list or DCCCD approved Social/Behavioral Science list. In addition, this elective may be a computer science course, a computer information systems course, or a multimedia course.
MULTIMEDIA TECHNOLOGY --
INTERNET COMMUNICATIONS

Richland only

(Level II Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.MULT.INTERNET.II

The Internet Communications Certificate programs teach the design and development of web sites for corporate, commercial and educational uses. Special emphasis is placed on incorporating multimedia elements to develop dynamic web sites. In addition to learning advanced HTML and page layout techniques, students learn basic web server technology and client-side scripting. Classes also address networks, security, and legal issues as they relate to the Internet.

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**SEMESTER II**

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<td>Web Page Design I</td>
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**SEMESTER III**

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<td>IMED 1305</td>
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<td>++Elective OR</td>
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12-13

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<td>IMED 2311</td>
<td>Portfolio Development</td>
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<tr>
<td>IMED 2388</td>
<td>Internship - Educational/Instructional Media Technology/Technician OR</td>
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<tr>
<td>IMED 1391</td>
<td>Special Topics in Educational/Instructional Media Technology/Technician</td>
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<td>++Elective OR</td>
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12-13

Minimum Hours Required: 48-50

**General Education Requirement - Students must take two of the following courses:**

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</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>MATH XXXX</td>
<td>(Math course can be chosen from the following list: College Algebra)</td>
<td>3</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
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<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Economics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>College Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1333</td>
<td>College Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Introductory Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2412</td>
<td>Precalculus Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>OR higher level</td>
<td></td>
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</tbody>
</table>

++Elective may be selected from the DCCCD approved Humanities/Fine Arts list or DCCCD approved Social/Behavioral Science list. In addition, this elective may be a computer science course, a computer information systems course, or a multimedia course.
**MULTIMEDIA TECHNOLOGY -- MULTIMEDIA DEVELOPER**

*Richland only*

(Level I Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.MULT.DEVELOP.1

The Multimedia Developer Certificate programs train students in the development of interactive animation and training applications for corporations, educational institutions, government organizations and publishers. Students develop multimedia pieces for both CD-ROM and Internet/Intranet delivery using the leading tools for web-based multimedia and learning.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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**SEMESTER I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>IMED 1301</td>
<td>Introduction to Multimedia</td>
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</tr>
<tr>
<td>IMED 1305</td>
<td>Multimedia Authoring I</td>
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<td>PHTC 1349</td>
<td>Photo Digital Imaging I</td>
<td>3</td>
</tr>
<tr>
<td>++General Education Requirement</td>
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<tr>
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**SEMESTER II**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>IMED 1316</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1345</td>
<td>Interactive Multimedia I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2305</td>
<td>Multimedia Authoring II</td>
<td>3</td>
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<tr>
<td>++General Education Requirement</td>
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**SEMESTER III**

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>BUSI 1301</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2345</td>
<td>Interactive Multimedia II</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2313</td>
<td>Project Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1351</td>
<td>Digital Video OR</td>
<td>3</td>
</tr>
<tr>
<td>++Elective OR</td>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>++Elective OR</td>
<td></td>
<td>(3-4)</td>
</tr>
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<td><strong>Total</strong></td>
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</table>

Minimum Hours Required: 36-37

+General Education Requirement - Students must take two of the following courses:

- ENGL 1301 Composition I .................................. 3
- SPCH 1311 Introduction to Speech Communication ...... 3
- MATH XXXX (Math course can be chosen from the following list):
  - MATH 1314 College Algebra .................................. 3
  - MATH 1324 Mathematics for Business and Economics I .................................. 3
  - MATH 1332 College Mathematics I .................................. 3
  - MATH 1333 College Mathematics II .................................. 3
  - MATH 1342 Introductory Statistics .................................. 3
  - MATH 1414 College Algebra .................................. 4
  - MATH 2412 Precalculus Mathematics .................................. 3
  - OR higher level

++Elective may be selected from the DCCCD approved Humanities/Fine Arts list or DCCCD approved Social/Behavioral Science list. In addition, this elective may be a computer science course, a computer information systems course, or a multimedia course.
MULTIMEDIA TECHNOLOGY — MULTIMEDIA DEVELOPER

Richland only

(Level II Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: C1.MULT.DEVELOP.1I

The Multimedia Developer Certificate programs train students in the development of interactive animation and training applications for corporations, educational institutions, government organizations and publishers. Students develop multimedia pieces for both CD-ROM and Internet/Intranet delivery using the leading tools for web-based multimedia and learning.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>IMED 1301 Introduction to Multimedia............... 3</td>
</tr>
<tr>
<td>IMED 1305 Multimedia Authoring I................... 3</td>
</tr>
<tr>
<td>PHTC 1349 Photo Digital Imaging I................... 3</td>
</tr>
<tr>
<td>+General Education Requirement...................... 3</td>
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</table>

| SEMESTER II   |
| IMED 1316 Web Page Design I.......................... 3 |
| IMED 1345 Interactive Multimedia I................... 3 |
| IMED 2305 Multimedia Authoring II.................... 3 |
| +General Education Requirement...................... 3 |
| 12            |

| SEMESTER III  |
| BUSI 1301 Introduction to Business.................. 3 |
| IMED 2345 Interactive Multimedia II.................. 3 |
| IMED 2313 Project Analysis and Design............... 3 |
| IMED 1351 Digital Video OR........................... 3 |
| ++ Elective OR........................................ (3) |
| ++ Elective ........................................... (3-4) |
| 12-13         |

| SEMESTER IV  |
| IMED 2351 Multimedia Programming.................... 3 |
| IMED 2311 Portfolio Development........................ 3 |
| IMED 2388 Internship — Educational/ Instructional Media Technology/Technician OR........... 3 |
| IMED 1391 Special Topics in Educational/ Instructional Media Technology/ Technician .................. 3 |
| ++ Elective ................................................................ (3-4) |
| 12-13         |

Minimum Hours Required.................................. 48-50

+General Education Requirement - Students must take two of the following courses:

| ENGL 1301 Composition I.................................. 3 |
| SPCH 1311 Introduction to Speech Communication......... 3 |
| MATH XXXX (Math course can be chosen from the following list:) |
| MATH 1314 College Algebra.................................. 3 |
| MATH 1324 Mathematics for Business and Economics I........ 3 |
| MATH 1332 College Mathematics I........................... 3 |
| MATH 1333 College Mathematics II.......................... 3 |
| MATH 1342 Introductory Statistics.......................... 3 |
| MATH 1414 College Algebra.................................. 4 |
| MATH 2412 Precalculus Mathematics.......................... 3 |
| OR higher level                                      |

++Elective may be selected from the DCCCD approved Humanities/Fine Arts list or DCCCD approved Social/Behavioral Science list. In addition, this elective may be a computer science course, a computer information systems course, or a multimedia course.

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MULTIMEDIA TECHNOLOGY -- VISUAL DESIGN

Richland only

(Level I Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.MULT.VISUAL.I

The Visual Design Certificate programs prepare students for image creation and manipulation on the computer. Courses focus on digital imaging techniques, animation and 3D graphics manipulation. Students also learn to incorporate graphics in pages for Internet delivery as well as on CD-ROM.

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<tbody>
<tr>
<td>IMED 1301</td>
<td>Introduction to Multimedia</td>
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<tr>
<td>IMED 1316</td>
<td>Web Page Design I</td>
<td>3</td>
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<tr>
<td>PHTC 1349</td>
<td>Photo Digital Imaging I</td>
<td>3</td>
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<td>IMED 1351</td>
<td>Digital Video</td>
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<td>IMED 1345</td>
<td>Interactive Multimedia I</td>
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<td>ARTC 1353</td>
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12

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<tr>
<td>BUSI 1301</td>
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</tr>
<tr>
<td>ARTC 1345</td>
<td>3-D Modeling and Rendering</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2313</td>
<td>Project Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1305</td>
<td>Multimedia Authoring I OR</td>
<td>3</td>
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<td></td>
<td>++Elective OR</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>++Elective</td>
<td>(3-4)</td>
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</table>

12-13

Minimum Hours Required ...................................... 36-37

+ General Education Requirement - Students must take two of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<tr>
<td>MATH XXXX</td>
<td>(Math course can be chosen from the following list)</td>
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<tr>
<td>MATH 1314</td>
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<td>3</td>
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<td>MATH 1324</td>
<td>Mathematics for Business and Economics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>College Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1333</td>
<td>College Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>Introductory Statistics</td>
<td>3</td>
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<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
<td>4</td>
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<tr>
<td>MATH 2412</td>
<td>Precalculus Mathematics</td>
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++Elective may be selected from the DCCCD approved Humanities/Fine Arts list or DCCCD approved Social/Behavioral Science list. In addition, this elective may be a computer science course, a computer information systems course, or a multimedia course.
MULTIMEDIA TECHNOLOGY -- VISUAL DESIGN

Richland only

(Level II Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.MULT.VISUAL.II

The Visual Design Certificate programs prepare students for image creation and manipulation on the computer. Courses focus on digital imaging techniques, animation and 3D graphics manipulation. Students also learn to incorporate graphics in pages for Internet delivery as well as on CD-ROM.

<table>
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<th>CREDIT HOURS</th>
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<tr>
<td>SEMESTER I</td>
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<tr>
<td>IMED 1301 Introduction to Multimedia</td>
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<tr>
<td>IMED 1316 Web Page Design I</td>
</tr>
<tr>
<td>PHTC 1349 Photo Digital Imaging I</td>
</tr>
<tr>
<td>+General Education Requirement</td>
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<tr>
<td>12</td>
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</tbody>
</table>

| SEMESTER II   |
| IMED 1351 Digital Video | 3 |
| IMED 1345 Interactive Multimedia I | 3 |
| ARTC 1353 Computer Illustration | 3 |
| +General Education Requirement | 3 |
| 12 |

| SEMESTER III  |
| BUSI 1301 Introduction to Business | 3 |
| ARTC 1345 3-D Modeling and Rendering | 3 |
| IMED 2313 Project Analysis and Design | 3 |
| IMED 1305 Multimedia Authoring I OR | 3 |
| +Elective OR | (3) |
| +Elective | (3-4) |
| 12-13 |

| SEMESTER IV   |
| PHTC 2349 Photo Digital Imaging II | 3 |
| IMED 2311 Portfolio Development | 3 |
| IMED 2388 Internship – Educational/Instructional Media Technology/Technician OR | 3 |
| IMED 1391 Special Topics in Educational/Instructional Media Technology/Technician | (3) |
| +Elective OR | (3-4) |
| +Elective | 12-13 |

Minimum Hours Required............................................ 48-50

+General Education Requirement - Students must take two of the following courses:

| ENGL 1301 Composition I | 3 |
| SPCH 1311 Introduction to Speech Communication | 3 |
| MATH XXXX (Math course can be chosen from the following list:) |
| MATH 1314 College Algebra | 3 |
| MATH 1324 Mathematics for Business and Economics I | 3 |
| MATH 1332 College Mathematics I | 3 |
| MATH 1333 College Mathematics II | 3 |
| MATH 1342 Introductory Statistics | 3 |
| MATH 1414 College Algebra | 4 |
| MATH 2412 Precalculus Mathematics | 3 |
| OR higher level |

++Elective may be selected from the DCCCD approved Humanities/Fine Arts list or DCCCD approved Social/Behavioral Science list. In addition, this elective may be a computer science course, a computer information systems course, or a multimedia course.
OFFICE TECHNOLOGY -- EXECUTIVE ASSISTANT

Offered at all seven campuses

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.OFCT.EXEC.ASSIST

The Associate in Applied Sciences Degree comprehensive curriculum is designed as an advanced level program to prepare students for executive assistant and computer support positions in an office environment. Students will use state-of-the-art technology to develop skills necessary to become a productive member of the business community. Topics include office management, human relations, records management, oral and written business communications, plus word processing, spreadsheets, database, presentation, and telecommunication applications.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<th>SEMESTER II</th>
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<tr>
<td></td>
<td>POFI 1301 Computer Applications I</td>
<td>3</td>
<td>POFO 1309 Administrative Office Procedures I OR</td>
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<td>POFO 2312 Business Communications II</td>
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<td>POFO 1302 Business Communications I</td>
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<td>POFO 1313 Professional Development for Office Personnel</td>
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<td>POFO 1349 Spreadsheets</td>
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<td>POFO 2301 Document Formatting and Skillbuilding</td>
<td>3</td>
<td>POFO 2301 Word Processing</td>
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<td>POFO 1319 Records and Information Management I</td>
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<td>POFO 1345 Integrated Software Applications II</td>
<td>3</td>
<td>POFO 1313 Composition I</td>
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<td>POFO 1341 Computer Applications II</td>
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<td>SPCH 1311 Introduction to Speech Communication</td>
<td>3</td>
<td>SPCH 1321 Business Math AND</td>
<td>3-4</td>
<td>++Elective</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>+++Elective</td>
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<td></td>
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<tr>
<td></td>
<td>ITCW 1407 Introduction to Database</td>
<td>4</td>
<td>POFO 1380 Cooperative Education-Administrative Assistant/Secretarial Science, General OR</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>POFO 1381 Cooperative Education-Administrative Assistant/Secretarial Science, General OR</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>POFO 2380 Cooperative Education-Administrative Assistant/Secretarial Science, General OR</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>POFO 2382 Cooperative Education - General Office/Clerical and Typing Services</td>
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<td></td>
<td></td>
<td></td>
<td>+++Elective</td>
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<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Minimum Hours Required</td>
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</tbody>
</table>

+Elective: One of the following Natural Science courses may be taken:

- ECOL 1305 People and Their Environment 3
- BIOL 1406 General Biology 4
- BIOL 1408 Biological Science 4
- BIOL 1409 Biological Science 4
- GEOL 1403 Physical Geology 4
- PHYS 1311 Descriptive Astronomy 3
- PHYS 1401 Introductory General Physics 4
- PHYS 1415 Physical Science 4

++Elective - Any POFO, POFO, ACCT, ACNT, or ITSC, ITSW, ITSE, ITNW course.

+++Elective - Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

++++Elective - Social/Behavioral Science elective must be selected from the DCCCD approved course list.

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
OFFICE TECHNOLOGY -- EXECUTIVE ASSISTANT - TECHPREPNAVY YEOMAN

Offered at all seven campuses

(Degree Plan Code: AAS.OFCT.NAVY.YEOMAN)

The DCCCD Navy Yeoman Option is developed in agreement with the United States Navy. This program is designed for Navy recruits only and incorporates the certificate programs leading to the Associate in Applied Sciences Degree in the Tech Prep Office Technology program. Each certificate serves as an exit point or as an incentive to continue to build promotion points and credentials while pursuing the Associate in Applied Sciences Degree during Navy training.

Exit Points:

Following the exit points within the curriculum pattern the student may:

1. Choose to enlist in the Navy September 1 after high school graduation. By completing all the tech prep high school courses and the courses listed in Summer I and II, the student will also graduate from one of the DCCCD Colleges with an Office Assistant Certificate.

2. Choose to continue during the Fall semester at the DCCCD college and defer enlistment in the Navy until January 1. This recruit will earn both the Office Assistant Certificate and the Software Application Specialist Certificate.

3. Choose to continue in the Spring semester at the DCCCD college and enlist in the Navy June 1, one year after high school graduation. This recruit will earn the Office Assistant Certificate, the Software Application Specialist Certificate and the Administrative Support Certificate. After the specialized Navy training, the yeoman will qualify for the AAS degree.

**CREDIT HOURS**

<table>
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<tr>
<th>SEMESTER I</th>
<th>ENGL1301 Composition I</th>
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<tr>
<td></td>
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<td></td>
<td>POFI 1301 Computer Applications I</td>
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<td>POFT 1309 Administrative Office Procedures</td>
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<tr>
<td></td>
<td>ACNT 1303 Introduction to Accounting I</td>
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</table>

**SEMMESTER II**

| POFT 2301 Document Formatting and Skillbuilding | 3 |
| POFI 1349 Spreadsheets                          | 3 |
| ITSW 1407 Introduction to Database              | 4 |
| POFI 1341 Computer Applications II              | 3 |
| POFI 2331 Desktop Publishing for the Office     | 3 |

| SEMESTER III       | POFT 2312 Business Communications II    | 3 |
|                   | POFT 1313 Professional Development for  | 3 |
|                   | Office Personnel                        | 3 |
|                   | +++Elective Social/Behavioral Science    | 3 |
|                   | ++Elective Humanities/Fine Arts          | 3 |

| SEMESTER IV NAVY Recruit Training                |
| POFT 1319 Records and Information Management I  |
| POFT 1349 Administrative Office Procedures II   |
| +Elective Natural Science                       | 3 |
| POFT 1380 Cooperative Education--Administrative |
| Assistant/Secretaryial Science, General         | 3 |
| POFT 2380 Cooperative Education--Administrative |
| Assistant/Secretaryial Science, General         | 3 |

Minimum Hours Required... 67-68

+Elective - DCCCD will articulate the Navy Training Nautical Science course to meet this requirement.

++Elective - Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

+++Elective - Social/Behavioral Science elective must be selected from the DCCCD approved course list.

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
OFFICE TECHNOLOGY--ADMINISTRATIVE SUPPORT

Offered at all seven campuses

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: C2.OFCT.ADMIN.SUPPT

The Administrative Support Certificate prepares students for a successful career as an office professional. The Certificate is developed to the specifications of the local job market.

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**SEMMESTER I**

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<td>POFI 1302</td>
<td>Business Communications I</td>
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<td>POFI 2301</td>
<td>Document Formatting and Skillbuilding</td>
<td>3</td>
</tr>
<tr>
<td>POFI 1345</td>
<td>Integrated Software Applications II</td>
<td>3</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech</td>
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**SEMMESTER II**

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<td>POFI 1309</td>
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<td>POFI 1313</td>
<td>Professional Development for Office Personnel</td>
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<td>POFI 1349</td>
<td>Spreadsheets</td>
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<td>Word Processing</td>
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<td>ENGL 1301</td>
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<tr>
<td>POFI 1325</td>
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**SEMMESTER III**

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<td>POFI 1319</td>
<td>Records and Information Management I OR</td>
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<td>ITSW 1407</td>
<td>Introduction to Database</td>
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<tr>
<td>POFI 2331</td>
<td>Desktop Publishing for the Office</td>
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**Electives**

Minimum Hours Required: 45-47

+Electives - Any POFI, POFI, OR ITSC, ITSW, ITSE, ITNW including but not limited to:

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OFFICE TECHNOLOGY --
OFFICE ASSISTANT

Offered at all seven campuses

(Certificate)

(Students pursuing this certificate program are waived from all TASP requirements.)

Degree Plan Code: C1.OFCT.OFF.ASSIST

Upon satisfactory completion of the Office Assistant Certificate, students are prepared for entry-level positions requiring basic office skills. This certificate may be completed in one semester.

CREDIT HOURS

SEMESTER I
POFI 1301 Computer Applications I OR ..................3
POFT 1319 Records and Information Management I .................(3)
POFT 1302 Business Communications I ..................3
POFT 1309 Administrative Office Procedures I OR ..................3
POFT 1313 Professional Development for Office Personnel ............(3)
POFI 1345 Integrated Software Applications II ..........3
+Electives ..................................................3-4

Minimum Hours Required ........................................15-16

+Electives - Any POFI, POFT, OR ITSC, ITSW, ITSE, ITNW including but not limited to:

POFT 1325 Business Math and Machine Applications ..........3
POFT 1380 Cooperative Education – Administrative Assistant/Secretarial Science, General ..........3
POFT 1381 Cooperative Education – Administrative Assistant/Secretarial Science, General ..........3

OFFICE TECHNOLOGY --
SOFTWARE APPLICATION SPECIALIST

Offered at all seven campuses

(Certificate)

(Students pursuing this certificate program are waived from all TASP requirements.)

Degree Plan Code: C1.OFCT.SOFT.APP.SPC

The Software Application Specialist Certificate provides a benchmark for students to measure their computer skills using Microsoft Office software. Microsoft Office User Specialist (MOUS) Certification, which provides students valuable credentials and a competitive edge, is available for those who master required competencies.

CREDIT HOURS

SEMESTER I
POFI 2301 Word Processing ..................................3
POFI 1349 Spreadsheets ..................................3
ITSW 1407 Introduction to Database ..................4
POFI 1341 Computer Applications II ..................3
POFI 2331 Desktop Publishing for the Office ........3

16

Minimum Hours Required ........................................16

+Electives - Any POFI, POFT, or ITSC, ITSW, ITSE, ITNW including but not limited to:

POFT 1325 Business Math and Machine Applications ..........3
POFT 1380 Cooperative Education – Administrative Assistant/Secretarial Science, General ..........3
POFT 1381 Cooperative Education – Administrative Assistant/Secretarial Science, General ..........3
ORNAMENTAL HORTICULTURE TECHNOLOGY--GREENHOUSE FLORIST

Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ORNAM.GREENHOUSE

This option prepares a student to enter the florist industry. The program places emphasis on those skills required for success in wholesale greenhouse flower production, retail floral design and sales, and retail greenhouse florist production and sales. Upon graduation, a student is qualified to enter a wide number of positions in crop production, sales and distribution, floral design and flower shop management.

### CREDIT HOURS

#### SEMESTER I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
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<tr>
<td>HALT 1320</td>
<td>Horticultural Calculations</td>
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<td>HALT 1315</td>
<td>Fundamentals of Landscape Planning</td>
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<td>Flower Shop Management</td>
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Minimum Hours Required: 65

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ORNAMENTAL HORTICULTURE TECHNOLOGY -- INTERIORSCAPE DESIGN

Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ORNAM.INTERIORSC

This option prepares an individual to enter the interiorscape industry which includes designing and maintaining tropical plants in commercial buildings, offices, and malls. The students will study design principles, management methods, tropical plant identification and maintenance, greenhouse production, and plant propagation techniques. Hands-on experience is emphasized in the coursework in addition to cooperative work experience.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
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<td>Trees ........................................... 2</td>
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Minimum Hours Required ........................................... 71

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ORNAMENTAL HORTICULTURE TECHNOLOGY -- INTERIORSCAPE

Richland College only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.HORT.INTERIOR

This program prepares the student to enter positions in the interiorscape industry which includes designing and maintaining tropical plants in commercial buildings.

<table>
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**SEMESTER I**

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<td>Horticulture Soils</td>
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**Total for Semester I:** 18

**SEMESTER II**

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<td>HALT 2201</td>
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<td>HALT 2341</td>
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<td>HALT 2380</td>
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<td>HALT 1391</td>
<td>Special Topics in Horticulture Services Operations and Management, General</td>
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<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<td>MATH 1324</td>
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**Total for Semester II:** 19

**Minimum Hours Required:** 37
ORNAMENTAL HORTICULTURE TECHNOLOGY -- LANDSCAPE MANAGEMENT

Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ORNAM.LAND.MANAG

This option prepares the student to enter the landscape contracting and the landscape installation and maintenance businesses. The student expands his preparation to meet his own specific goals through directing two semesters of cooperative work experience toward areas in which he desires greater preparation. Landscape management is the fastest growing field in ornamental horticulture and provides excellent employment opportunities. A student completing this option is also well prepared for work in city park departments and in state and federal park development.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HALT 1217</td>
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Minimum Hours Required: 71

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ORNAMENTAL HORTICULTURE TECHNOLOGY - FLORIST

Richland only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.HORT.FLORIST

This program prepares the student to enter positions in floral design, retail flower shop operations, and sales and distribution of flowers and florist supplies.

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| SEMESTER II |
| HALT 1211  | Shrubs, Vines, and Groundcovers | 2 |
| HALT 1209  | Interior Plants | 2 |
| HALT 1303  | Herbaceous Plants | 3 |
| FMKT 2331  | Advanced Floral Design | 3 |
| FMKT 2335  | Flower Shop Management | 3 |
| HALT 2380  | Cooperative Education - Horticulture Services Operations and Management, General OR | 3 |
| HALT 1391  | Special Topics in Horticulture Services Operations and Management, General | (3) |
| SPCH 1311  | Introduction to Speech Communication | 2 |
|            | Total          | 18 |

Minimum Hours Required ........................................... 35-36

ORNAMENTAL HORTICULTURE TECHNOLOGY -- LANDSCAPE GARDENER

Richland only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.HORT.LANDSCAPE

This program prepares the student to enter positions in landscape construction, park maintenance, home landscape and garden services, and garden center and nursery sales. Through the selection of electives and occupational experiences the student can guide his training toward specific jobs.

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| SEMESTER II |
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| HALT 1209  | Interior Plants | 2 |
| HALT 1303  | Herbaceous Plants | 3 |
| FMKT 2331  | Cooperative Education - Horticulture Services Operations and Management, General OR | 3 |
| HALT 1391  | Special Topics in Horticulture Services Operations and Management, General OR | (3) |
| HALT 1205  | Horticulture Soils | 2 |
| HALT 2201  | Arboriculture | 2 |
| HALT 1224  | Turfgrass Science and Management | 2 |
|            | Total          | 16 |

Minimum Hours Required ........................................... 34
ORNAMENTAL HORTICULTURE TECHNOLOGY – LANDSCAPE NURSERY

Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.ORNAM.LAND.NURS

This option prepares a student to enter both the landscaping industry and the nursery industry at a technician level. The program places emphasis on those skills required for success in landscape service, nursery production and landscape planning businesses. A student who completes this training is prepared for work in park and recreation departments, production nurseries, industrial parks and gardens.

CREDIT HOURS

SEMESTER I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>HALL 1401</td>
<td>Principles of Horticulture</td>
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<tr>
<td>HALL 1217</td>
<td>Trees</td>
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<tr>
<td>HALL 1315</td>
<td>Fundamentals of Landscape Planning</td>
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<td>HALL 1213</td>
<td>Economic Entomology</td>
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<tr>
<td>BIOL 1411</td>
<td>Introductory Botany OR</td>
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<tr>
<td>HALL 1211</td>
<td>Shrubs, Vines, and Groundcovers</td>
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<tr>
<td>HALL 1303</td>
<td>Herbaceous Plants</td>
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<tr>
<td>HALL 1253</td>
<td>Landscape Computer Design</td>
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<tr>
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<td>Horticulture Soils</td>
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<td>ITSC 1401</td>
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<td>POFT 1321</td>
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<td>HALL 2320</td>
<td>Nursery Production and Management</td>
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</tr>
<tr>
<td>HALL 2402</td>
<td>Greenhouse Crop Production</td>
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<tr>
<td>HALL 1422</td>
<td>Landscape Design</td>
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<td>PSYC 2301</td>
<td>Introduction to Psychology OR</td>
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<td>PSYC 2302</td>
<td>Applied Psychology</td>
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<tr>
<td>ARTS 1311</td>
<td>Design I OR</td>
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<td>ARTS 1316</td>
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<td>HALL 1351</td>
<td>Landscape Business Operations</td>
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<tr>
<td>HALL 2380</td>
<td>Cooperative Education – Horticulture Services Operations and Management, General OR</td>
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<tr>
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<td>Special Topics in Horticulture Services Operations and Management, General</td>
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<tr>
<td>HALL 2341</td>
<td>Interiorscaping</td>
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Minimum Hours Required: 71

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
PARALEGAL

El Centro only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.PARALEGAL

The Paralegal Program is an Associate in Applied Sciences Degree program designed to prepare the student to function as a technically qualified assistant to the lawyer. Legal assistants (also called paralegals) typically work in law firms, governmental agencies, and corporations. The program does not qualify a graduate to take a Bar exam, represent clients in court, or give legal advice.

CREDIT HOURS

SEMESTER I
LGLA 1301 Legal Research and Writing ..........3
LGLA 1311 Introduction to Law ...................3
LGLA 1313 Introduction to Paralegal Studies ....3
ENGL 1301 Composition I ........................3
MATH 1314 College Algebra OR ....................3
MATH 1414 College Algebra ........................4
15-16

SEMESTER II
LGLA 1355 Family Law ................................3
LGLA 2309 Real Property ..........................3
LGLA 2311 Business Organizations ...............3
SPCH 1311 Introduction to Speech Communication 3
CISC 1470 Introduction to Computer Concepts and Applications .................4
16

SEMESTER III
LGLA 1345 Civil Litigation ..........................3
LGLA 1351 Contracts ................................3
LGLA 1353 Wills, Trusts and Probate Administration 3
GOVT 2301 American Government ................3
+Elective Paralegal Elective ...................2-3
++Elective Humanities/Fine Arts .................3
17-18

SEMESTER IV
LGLA 2303 Torts and Personal Injury Law ..........3
LGLA 2307 Law Office Management ...............3
LGLA 2331 Advanced Legal Research and Writing ....3
+Elective Paralegal Elective ...................2-3
+++Elective Social/Behavioral Science ...........3
14-15

Minimum Hours Required ..........................62-65

+Paralegal Electives—Student may select two 3 SCH courses or three 2 SCH Practica to complete this requirement over two semesters. Thus, the student will complete either 3 SCH each semester, or 4 SCH in one semester and 2 SCH in another semester. SIX hours must be selected from the following:

LGLA 1266 Practicum-Paralegal/Legal Assistant ....2
LGLA 1343 Bankruptcy ................................3
LGLA 1380 Cooperative Education-Paralegal/Legal Assistant 3
LGLA 2266 Practicum-Paralegal/Legal Assistant ....3
LGLA 2267 Practicum-Paralegal/Legal Assistant ....2
LGLA 2313 Criminal Law and Procedure ............3
LGLA 2335 Advanced Civil Litigation ................3
LGLA 2380 Cooperative Education-Paralegal/Legal Assistant 3

++Humanities/Fine Arts Electives—THREE hours must be selected from the following:

ARTS 1301 Art Appreciation ........................3
DRAM 1310 Introduction to Theatre ................3
ENGL (2000 Lvl Language Course) .................3
Foreign Language or American Sign Language ....
HUMA 1301 Introduction to the Humanities .......3
MUSI 1306 Music Appreciation ....................3
PHIL 1301 Introduction to Philosophy .............3

+++Social/Behavioral Science Electives—THREE hours must be selected from the following:

HIST 1301 History of the United States ..........3
PSYC 2301 Introduction to Psychology ............3
SOCI 1301 Introduction to Sociology .............3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
PARAMEDIC

El Centro only

(Certificate – Level I)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.EMT.PARAMEDIC

The Paramedic Certificate Option is for students already certified as Emergency Medical Technicians. Potential students will be considered on an individual basis to determine if they have an adequate background in anatomy and physiology, math and reading.

PREREQUISITE REQUIREMENT

Completion of EMT training and transcripted Anatomy/Physiology coursework or passing the Anatomy/Physiology competency exam ..................... 8

SEMESTER I

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<td>EMSP 1355</td>
<td>Trauma Management</td>
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<td>EMSP 2544</td>
<td>Cardiology</td>
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SEMESTER II

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<td>EMSP 2430</td>
<td>Special Populations</td>
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<tr>
<td>EMSP 2188</td>
<td>Internship-Emergency Medical Technology/Technician</td>
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SEMESTER III

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<td>EMS Operations</td>
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<td>EMSP 2143</td>
<td>Assessment Based Management</td>
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<tr>
<td>EMSP 2289</td>
<td>Internship-Emergency Medical Technology/Technician</td>
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<tr>
<td>EMSP 2586</td>
<td>Internship-Emergency Medical Technology/Technician</td>
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Minimum Hours Required ........................................ 41

*Students who have previous EMT, Anatomy and Physiology coursework/experience will receive 8 hours credit for these two classes.

PATIENT CARE TECHNICIAN

Cedar Valley only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.PATIENT.CARE

The one-semester Patient Care Technician program is designed to prepare students for entry-level positions in the health care industry. Students learn to apply basic medical assisting skills in a variety of settings, including hospitals, clinics, in-home care environments, day care, and assisted living facilities. Skills developed will include patient hygiene and comfort, medical charting, patient safety, obtaining lab samples, phlebotomy, and electrocardiography. Successful completion of the classroom portion is mandatory to progress to the clinical practicum. Upon successful completion of classroom study and the practicum, students will be awarded the Patient Care Technician Certificate.

CREDIT HOURS

SEMESTER I

<table>
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<tr>
<th>Course Code</th>
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<td>MDCA 1205</td>
<td>Medical Law and Ethics</td>
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<tr>
<td>NURA 1301</td>
<td>Nurse Aide for HealthCare Organizations I</td>
<td>3</td>
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<td>NURA 1307</td>
<td>Nurse Aide for HealthCare Organizations II</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communications</td>
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<td>NURA 1260</td>
<td>Clinical-Nursing Assistant/Aide</td>
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16

Minimum Hours Required ........................................ 16
PLUMBING AND PIPEFITTING CONSTRUCTION

North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.PLMB/PIPEFITTING

In partnership with the Dallas Joint Apprenticeship Committee for the Plumbing and Pipefitting Industry, this program will prepare students for employment as a Plumbing or Pipefitting journeyman. Successful completion of all phases of the curriculum and the coordinated on-the-job training prepares the student for the State of Texas examination for Plumbers and Pipefitters. The student will also cover additional math and science, communications, planning, problem solving, human relations and management skills.

Plumbing and Pipefitting Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>CNTB 1201</td>
<td>Introduction to Construction</td>
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<tr>
<td>WLDG 1221</td>
<td>Introduction to Welding</td>
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<tr>
<td>DFTG 1232</td>
<td>Mechanical Drafting</td>
</tr>
<tr>
<td>WLDG 1222</td>
<td>Introduction to Welding</td>
</tr>
<tr>
<td>+Elective</td>
<td>Plumbing and Pipefitting</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
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<tr>
<td>TECM 1341</td>
<td>Technical Algebra AND</td>
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<tbody>
<tr>
<td>PFPB 2347</td>
<td>Plumbing and Pipefitting Equipment and Safety</td>
</tr>
<tr>
<td>DFTG 1208</td>
<td>Basic Computer-Aided Drafting</td>
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<tr>
<td>#PFPB 1345</td>
<td>Plumbing Option OR</td>
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<tr>
<td>##ELPT 1311</td>
<td>Pipefitting Option</td>
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<tr>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<tbody>
<tr>
<td>WLDG 2213</td>
<td>Welding Using Multiple Processes</td>
</tr>
<tr>
<td>WLDG 1253</td>
<td>Intermediate Layout and Fabrication</td>
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<tr>
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<tr>
<td>+Electives</td>
<td>Humanities/Fine Arts</td>
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Minimum Hours Required ............................................ 60-64

+Electives - Plumbing and Pipefitting: Students must complete one of the two options listed below.

PIPEFITTERS OPTION:

| PFPB 2275       | Commercial and Industrial Control Systems                        | 2 |
| PFPB 2276       | Commercial and Industrial Systems Start-Up                       | 2 |

PLUMBING OPTION:

| PFPB 1291       | Special Topics in Plumber and Pipefitter                         | 2 |
| PFPB 1270       | Commercial Plumbing II                                           | 2  |
| PFPB 1271       | Commercial Plumbing II                                           | 2  |
| PFPB 2270       | Industrial Plumbing                                              | 2  |
| PFPB 1372       | Plumbing Codes I                                                | 3  |
| PFPB 2272       | Commercial and Industrial Gas Installation                      | 2  |
| PFPB 2371       | Plumbing Codes II                                               | 2  |
| PFPB 2274       | Medical Gas                                                     | 2  |
| PFPB 2273       | Backflow Prevention                                             | 2  |

++ Humanities/Fine Arts course: This includes any course with the title of Humanities, Art, Music, Philosophy, Dance, Drama, Religion, Foreign Language.

+++ Social/Behavioral Science course: This includes any course with the title of Anthropology, Government, History, Human Development, Psychology, or Sociology.

++++Management course: This includes any course from Business, Management, or Hospitality Management.

# PLUMBING OPTION:

| PFPB 1345       | Commercial Construction and Fixture Setting                      | 3  |

## PIPEFITTING OPTION:

| ELPT 1311       | Basic Electrical Theory                                         | 3  |

*Students selecting TECM 1341 must also complete a Natural Science course. Natural Science Elective-Students must choose from the approved list provided in the catalog.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
PLUMBING AND PIPEFITTING
CONSTRUCTION--PIPEFITTING

North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements)

Degree Plan Code: CERT.PPFA.PIPEFITTING

In partnership with the Dallas Joint Apprenticeship Committee for the Plumbing and Pipefitting Industry, this program provides a one-year certificate in Pipefitting when the students complete the technical and on-the-job training outlined in the certificate for Pipefitting. Topics covered include layout and fabrication of pipe, welding, print reading, trade math, science, rigging, residential, commercial and industrial HVAC, control drafting applications, pipefitting equipment with an emphasis on safety.

Plumbing and Pipefitting Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

<table>
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<tr>
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<tr>
<td>WLDG 1221</td>
<td>Introduction to Welding Fundamentals .......... 2</td>
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<tr>
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<td>Mechanical Drafting .......... 2</td>
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<tr>
<td>WLDG 1222</td>
<td>Introduction to Welding Fundamentals .......... 2</td>
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Minimum Hours Required .......... 42
PLUMBING AND PIPEFITTING CONSTRUCTION -- PLUMBING

North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.PPFA.PLUMBING

In partnership with the Dallas Joint Apprenticeship Committee for the Plumbing and Pipefitting Industry, this program provides a one-year certificate in Plumbing when the students complete the technical and on-the-job training outlined in the certificate for Plumbing. Topics covered include welding, print reading, trade math, science, rigging, water supply and waste systems, residential, commercial and industrial plumbing systems, natural gas, plumbing codes, drafting applications, plumbing equipment with an emphasis on safety.

Plumbing and Pipefitting Construction is a nationally approved apprenticeship program. Additional admission requirements are necessary for enrollment in this program.

CREDIT HOURS

SEMESTER I

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Minimum Hours Required ........................................ 12

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<tr>
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Minimum Hours Required ........................................ 14

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<tbody>
<tr>
<td>PFPB 2272</td>
<td>Commercial and Industrial Gas</td>
<td>3</td>
</tr>
<tr>
<td>PFPB 2371</td>
<td>Plumbing Codes II</td>
<td>2</td>
</tr>
<tr>
<td>PFPB 1345</td>
<td>Commercial Construction and Fixture</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1208</td>
<td>Basic Computer-Aided Drafting</td>
<td>2</td>
</tr>
<tr>
<td>WLDG 2213</td>
<td>Welding Using Multiple Processes</td>
<td>2</td>
</tr>
<tr>
<td>PFPB 2274</td>
<td>Medical Gas</td>
<td>2</td>
</tr>
<tr>
<td>WLDG 2213</td>
<td>Welding Using Multiple Processes</td>
<td>2</td>
</tr>
<tr>
<td>PFPB 2273</td>
<td>Backflow Prevention</td>
<td>2</td>
</tr>
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</table>

Minimum Hours Required ........................................ 16

255
POSTAL SERVICE

Mountain View only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.POSTAL.SERVICE

The Postal Service curriculum is designed as a two-year program that leads to an Associate Degree in Applied Sciences. The program aids the student in developing postal skills and provides the student with an insight into multi-level functions employed throughout the postal service system. Emphasis is directed to the areas of methodology, technology, management, and leadership concepts reflected in modern day technology as applied to public service related agencies.

This curriculum pattern/degree plan will be revised prior to Fall 2000. The revised curriculum changes can be accessed and viewed on the Dallas County Community College District homepage [http://www.dcccd.edu/admiss/dp.htm].

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
RADIOLOGIC SCIENCES

El Centro only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.RADIOLOG.SCI

This program prepares the student to become a professional radiologic technologist with a specialty in radiography. The radiographer uses radiation to produce internal images of the human being which are used by the physician to make diagnoses. For the vast majority of diagnostic procedures, the radiographer has total responsibility for the care and well-being of the patient and must be prepared to produce quality images with care and empathy.

The graduate radiographer is eligible to sit for the examination given by the American Registry of Radiologic Technologists and eligible to be a Certified Medical Radiologic Technologist licensed by the Texas Department of Health. Radiographers work in hospitals, physician’s offices, and primary care facilities.

Students must be admitted to the program. Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, completion of four prerequisite courses with a minimum of 2.5 grade point average and completion of all requirements for admission as a full-time student to the College. Applicants are rank-ordered for admission based on grade point average earned for the prerequisite courses. Applicants should contact the Assessment Center at El Centro College to sign up for the assessment tests and Health Occupations Admissions to obtain an information packet.

Completion of the program and successful completion of the ARRT examination provides the graduate with credentials to continue their education in other radiologic specialty disciplines. The program is accredited by the Joint Review Committee in Radiologic Technology (JRCERT, 20 N. Wacker Drive, Suite 900, Chicago, Illinois 60606-2901: Telephone number 312-704-5304).

PREREQUISITES:

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>SEMESTER I</td>
</tr>
<tr>
<td>HPRS 2231</td>
</tr>
<tr>
<td>RADR 2213</td>
</tr>
<tr>
<td>HPRS 1204</td>
</tr>
<tr>
<td>RADR 1411</td>
</tr>
<tr>
<td>BIOL 1472</td>
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<tr>
<td>BIOL 2402</td>
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<tr>
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<td>SEMESTER II</td>
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<tr>
<td>RADR 1313</td>
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<tr>
<td>RADR 2301</td>
</tr>
<tr>
<td>HPRS 1291</td>
</tr>
<tr>
<td>SPCH 1311</td>
</tr>
<tr>
<td>+Elective</td>
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<tr>
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<tr>
<td>SEMESTER III</td>
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<tr>
<td>RADR 1166</td>
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(continued on next page)
<table>
<thead>
<tr>
<th>Semester  IV</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HPRS 2201</td>
<td></td>
<td>Pathophysiology</td>
<td>2</td>
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<tr>
<td>RADR 2305</td>
<td></td>
<td>Principles of Radiographic Imaging II</td>
<td>3</td>
</tr>
<tr>
<td>RADR 2331</td>
<td></td>
<td>Advanced Radiographic Procedures</td>
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</tr>
<tr>
<td>RADR 1267</td>
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<td>Practicum (or Field Experience) - Medical Radiologic Technology/Technician</td>
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<table>
<thead>
<tr>
<th>Semester  V</th>
<th>Course Code</th>
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<tbody>
<tr>
<td>HPRS 2300</td>
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<td>Pharmacology for Health</td>
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<td>RADR 2209</td>
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<td>Radiographic Imaging Equipment</td>
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<tr>
<td>RADR 2217</td>
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<td>Radiographic Pathology</td>
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<tr>
<td>RADR 2266</td>
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<td>Practicum (or Field Experience) - Medical Radiologic Technology/Technician</td>
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<tr>
<td>RADR 2133</td>
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<td>Advanced Medical Imaging</td>
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<td>RADR 2235</td>
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<table>
<thead>
<tr>
<th>Semester  VI</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADR 2267</td>
<td></td>
<td>Practicum (or Field Experience) - Medical Radiologic Technology/Technician</td>
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Minimum Hours Required: 68-69

* Elective - may be selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>Introduction to the Theatre</td>
<td>3</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to Humanities</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
</tbody>
</table>
REAL ESTATE

Cedar Valley, North Lake and Richland only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.REAL.ESTATE

The program in real estate is designed to develop the
fundamental skills, attitudes and experiences which enable
the student to function in decision-making positions in the
real estate profession. Successful completion of the
program leads to the Associate in Applied Sciences
Degree and may be applied toward licensing requirements
as determined by the Texas Real Estate Commission.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELE 1301 Principles of Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RELE 2301 Law of Agency</td>
<td>3</td>
</tr>
<tr>
<td>BUSI 1301 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELE 1321 Real Estate Marketing</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1311 Law of Contracts</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1319 Real Estate Finance</td>
<td>3</td>
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<tr>
<td>Elective</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>RELE 1309 Real Estate Law</td>
<td>3</td>
</tr>
<tr>
<td>RELE 2388 Internship-Real Estate OR RELE 2380 Cooperative Education-Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1323 Real Estate Computer Application</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2301 Principles of Economics I OR ECON 1303 Economics of Contemporary Issues</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>RELE 1303 Real Estate Appraisal OR RELE 1327 Real Estate Commercial Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1324 Mathematics for Business and Economics I OR RELE 1325 Real Estate Mathematics AND ECOL 1305 People and Their Environment</td>
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</tr>
<tr>
<td>PSYC 2302 Applied Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
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<tr>
<td>Elective Humanities/Fine Arts</td>
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<td><strong>Total</strong></td>
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Minimum Hours Required: 60-63

Recommended Electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>BMGT 1333</td>
<td>Principles of Selling</td>
</tr>
<tr>
<td>RELE 1105</td>
<td>Uniform Standards of Professional Appraisal Practice</td>
</tr>
<tr>
<td>RELE 1191</td>
<td>Special Topics in Real Estate</td>
</tr>
<tr>
<td>RELE 1291</td>
<td>Special Topics in Real Estate</td>
</tr>
<tr>
<td>RELE 1307</td>
<td>Real Estate Investment</td>
</tr>
<tr>
<td>RELE 1315</td>
<td>Property Management</td>
</tr>
<tr>
<td>RELE 1391</td>
<td>Special Topics in Real Estate</td>
</tr>
<tr>
<td>RELE 2305</td>
<td>Real Estate Inspection</td>
</tr>
<tr>
<td>RELE 2331</td>
<td>Real Estate Brokerage</td>
</tr>
<tr>
<td>RELE 2381</td>
<td>Cooperative Education-Real Estate</td>
</tr>
<tr>
<td>RELE 2389</td>
<td>Internship-Real Estate</td>
</tr>
</tbody>
</table>

A student cannot take more than THREE Special Topics courses toward the degree.

Elective-Humanities/Fine Arts elective must be selected from the DCCCD approved course list.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
REAL ESTATE

*Cedar Valley, North Lake and Richland only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.REAL.ESTATE

This 15-hour Certificate program develops the basic skills for a real estate salesperson. Three of the five courses are required by the Texas Real Estate Commission for licensure.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>SEMESTER I</th>
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</thead>
<tbody>
<tr>
<td>HOURS</td>
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<tr>
<td></td>
<td>RELE 1301 Principles of Real Estate .................. 3</td>
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<tr>
<td></td>
<td>RELE 2301 Law of Agency .................................. 3</td>
</tr>
<tr>
<td></td>
<td>RELE 1311 Law of Contracts ............................. 3</td>
</tr>
<tr>
<td></td>
<td>RELE XXXX Real Estate Elective ........................ 6</td>
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<tr>
<td></td>
<td>15</td>
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Recommended Electives:

- RELE 1323 Real Estate Computer Application .... 3
- RELE 1325 Real Estate Mathematics ................. 3
- RELE 1319 Real Estate Finance ........................ 3
- RELE 1321 Real Estate Marketing ..................... 3
- RELE 1105 Uniform Standards of Professional Appraisal ........ 1
- RELE 1191 Special Topics in Real Estate .......... 1
- RELE 1291 Special Topics in Real Estate .......... 2
- RELE 1303 Real Estate Appraisal ..................... 3
- RELE 1307 Real Estate Investment ..................... 3
- RELE 1315 Property Management ..................... 3
- RELE 1391 Special Topics in Real Estate .......... 3
- RELE 2305 Real Estate Inspections ................. 3
- RELE 2331 Real Estate Brokerage ................... 3
- RELE 2381 Cooperative Education-Real Estate .... 3
- RELE 2389 Internship-Real Estate .................... 3
REAL ESTATE -- BUILDING PROPERTY MANAGEMENT

North Lake only

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.REAL.EST.BPM

This program is designed to provide the student with the skills and knowledge required to perform the duties of a commercial building manager. These duties include financial forecasting and budgeting, marketing, contract negotiation, tenant retention, public relations, personnel administration, risk management, provision of building services and maintenance of the property.

### CREDIT HOURS

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBFM 1311 Building Maintenance I</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1301 Principles of Real Estate</td>
<td>3</td>
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<tr>
<td>ENGL 1301 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1324 Mathematics for Business and Economics I</td>
<td>3</td>
</tr>
<tr>
<td>+Elective Humanities/Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td><strong>SEMESTER II</strong></td>
<td></td>
</tr>
<tr>
<td>CBFM 2311 Building Maintenance II</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1307 Real Estate Investment</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1309 Real Estate Law</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>+Elective Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td><strong>SEMESTER III</strong></td>
<td></td>
</tr>
<tr>
<td>RELE 1315 Property Management</td>
<td>3</td>
</tr>
<tr>
<td>CISC 1470 Introduction to Computer Concepts and Applications</td>
<td>4</td>
</tr>
<tr>
<td>+++Elective Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>+++Electives Business</td>
<td>6</td>
</tr>
<tr>
<td><strong>SEMESTER IV</strong></td>
<td></td>
</tr>
<tr>
<td>RELE 1381 Cooperative Education—Real Estate</td>
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<tr>
<td>+++Elective Real Estate</td>
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<tr>
<td>#Electives</td>
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Minimum Hours Required 61

+Elective must be selected from Humanities/Fine Arts.
++Elective must be selected from Social/Behavioral Sciences.
+++Electives must be selected from the following business courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ACCT 2301</td>
<td>Principles of Accounting I OR...</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2401</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BMGT 1303</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BMGT 1301</td>
<td>Introduction to Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUSI 1301</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2301</td>
<td>Principles of Economics I</td>
<td>3</td>
</tr>
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<td>ECON 2302</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>HRPO 2307</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
</tbody>
</table>

Any Office Technology information/word processing applications course (OFCT 1271, OFCT 1172, OFCT 2170, OFCT 2171, OFCT 2172) OR Any Real Estate course (see catalog)

Students planning to take the Texas Real Estate License Examination need to select RELE 2301 Law of Agency.

++++Electives may be selected from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>INSR 1345</td>
<td>Commercial Liability Risk Management and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1321</td>
<td>Real Estate Marketing</td>
<td>3</td>
</tr>
<tr>
<td>RELE 1329</td>
<td>Fundamentals of Environmental Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

#Electives may be selected from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNBT 1302</td>
<td>Mechanical, Plumbing, and Electrical Systems in Construction</td>
<td>3</td>
</tr>
<tr>
<td>CNBT 1391</td>
<td>Special Topics in Construction/Building Technology/Technician</td>
<td>3</td>
</tr>
<tr>
<td>HART 1291</td>
<td>Special Topics in Heating, Air Conditioning and Refrigeration Technologies/Technician</td>
<td>2</td>
</tr>
<tr>
<td>HART 1292</td>
<td>Special Topics in Energy Management and Systems Technology/Technician</td>
<td>2</td>
</tr>
<tr>
<td>SEST 1341</td>
<td>Boilers—Operations: Installation and Maintenance</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
REAL ESTATE -- BUILDING
PROPERTY MANAGEMENT

North Lake only

(Certificate)

(Students pursuing this certificate program are
waived from TASP requirements.)

Degree Plan Code: CERT.REAL.BPM

The certificate in Building Property Management is
designed to provide the student with the basic technical
skills and knowledge required for entry into the career field
of building property management. Upon completion of this
certificate program, the student will be able to participate in
the day to day problem solving and decision making
processes performed by a property manager under the
supervision of an experienced professional.

CREDIT
HOURS

SEMESTER I
CBFM 1311 Building Maintenance I .................3
RELE 1301 Principles of Real Estate .................3
ENGL 1301 Composition I ............................3
MATH 1324 Mathematics for Business and
Economics I ........................................... 3
+Elective Humanities/Fine Arts .......................3

SEMESTER II
CBFM 2311 Building Maintenance II ...............3
RELE 1307 Real Estate Investment ..................3
RELE 1309 Real Estate Law ..........................3
SPCH 1311 Introduction to Speech
Communication .........................................3

SEMPER III
RELE 1315 Property Management ....................3
CISC 1470 Introduction to Computer Concepts
and Applications .....................................4
+Electives ..........................................13

Minimum Hours Required .............................40

+Elective must be selected from Humanities/Fine Arts.

+Electives may be selected from the following courses:
CNBT 1302 Mechanical, Plumbing, and Electrical Systems
in Construction ........................................3
CNBT 1391 Special Topics in Construction/Building
Technology/Technician ...............................3
HART 1291 Special Topics in Heating, Air Conditioning and
Refrigeration Technologies/Technician ...........2
HART 1292 Special Topics in Energy Management and
Systems Technology/Technician ....................2
SEST 1341 Boilers --Operations: Installation
and Maintenance .......................................3
RESPIRATORY CARE  

EI Centro only

(Associate in Applied Sciences Degree, Tech Prep  
Enhanced Skills Certificate)

Degree Plan Code: AAS.RESPIRATOR.CARE

The Respiratory Care Program prepares students to  
become respiratory therapists and perform complex  
patient care procedures in specialized patient care units  
and diagnostic laboratories.

The Associate in Applied Sciences degree is awarded for  
successful completion of the program, enabling the  
graduate to apply for the Entry Level Credentialing  
Examination to become a Certified Respiratory Therapy  
Technician (CRTT). After CRTT certification is obtained,  
the graduate may then apply for the Advanced Practitioner  
Examination to become a Registered Respiratory  
Therapist (RRT). Passing the Entry Level Examination  
enables the graduate to obtain licensure as a Respiratory  
Care Practitioner (RCP) in the State of Texas.

The Respiratory Care Program is accredited by the  
Commission on Accreditation of Allied Health Education  
Programs (CAAHEP, 35 East Wacker Drive, Suite 1970,  
Chicago, Illinois 60601-2208; Telephone number 312-  
553-9355) in cooperation with the Committee on  
Accreditation for Respiratory Care (CoARC, 1701 W.  
Euless Blvd., Suite 300, Euless, Texas 76040-6823:  
Telephone number 817-283-2835).

Admission requirements include satisfactory scores on  
pre-entrance assessment testing, completion of program  
prerequisite courses with a cumulative grade point  
average of 2.5 or better, rank ordering by grade point  
average, and completion of all requirements for admission  
as a full-time student to the college. Clinical skills testing  
may be required for advanced placement. Contact the  
Health Occupations Admissions Office at EI Centro  
College to receive an information packet, and the  
Assessment Center to sign up for the assessment tests.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>HPRS 1204</td>
<td>Basic Health Profession Skills 2</td>
</tr>
<tr>
<td>HPRS 1202</td>
<td>Wellness and Health Promotion 2</td>
</tr>
<tr>
<td>HPRS 2231</td>
<td>General Health Professions 2</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I 3</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra 3</td>
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<tr>
<td>BIOL 1470</td>
<td>Introduction to Human Anatomy and Physiology OR 4</td>
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<tr>
<td>BIOL 2401</td>
<td>Anatomy and Physiology I (4)</td>
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</table>

Note: Pending approval, curriculum changes will affect students admitted Fall 2000.

<table>
<thead>
<tr>
<th>SEMESTER II</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>HPRS 2201</td>
<td>Pathophysiology 2</td>
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<tr>
<td>HPRS 2300</td>
<td>Pharmacology for Health 3</td>
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<tr>
<td>HPRS 1291</td>
<td>Special Topics in Health Professions and Related Sciences, Other 2</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication 3</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>Introduction to Psychology 3</td>
</tr>
<tr>
<td>BIOL 1472</td>
<td>Introduction to Human Anatomy and Physiology OR 4</td>
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<tr>
<td>BIOL 2402</td>
<td>Anatomy and Physiology II (4)</td>
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<tbody>
<tr>
<td>+Elective RSPT 1227</td>
<td>Applied Physics for Respiratory Care 3</td>
</tr>
<tr>
<td>RSPT 1431</td>
<td>Respiratory Care Fundamentals II 4</td>
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<table>
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<tbody>
<tr>
<td>RSPT 1307</td>
<td>Cardiopulmonary Anatomy and Physiology 3</td>
</tr>
<tr>
<td>RSPT 1213</td>
<td>Basic Respiratory Care Pharmacology 2</td>
</tr>
<tr>
<td>RSPT 1311</td>
<td>Respiratory Care Procedures II 3</td>
</tr>
<tr>
<td>RSPT 2201</td>
<td>Cardiopulmonary Assessment 2</td>
</tr>
<tr>
<td>RSPT 2310</td>
<td>Cardiopulmonary Disease 3</td>
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<td>RSPT 1260</td>
<td>Clinical-Respiratory Therapy 2</td>
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<tr>
<td>RSPT 2453</td>
<td>Neonatal/Pediatric Cardiopulmonary Care 4</td>
</tr>
<tr>
<td>RSPT 2314</td>
<td>Mechanical Ventilation 3</td>
</tr>
<tr>
<td>RSPT 2258</td>
<td>Advanced Respiratory Care Patient Assessment 2</td>
</tr>
<tr>
<td>RSPT 2131</td>
<td>(Clinical) Simulations in Respiratory Care 2</td>
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<tr>
<td>RSPT 1141</td>
<td>Respiratory Home Care/Rehabilitation 1</td>
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<tr>
<td>RSPT 2262</td>
<td>Clinical-Respiratory Therapy 2</td>
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<tr>
<th>SEMESTER VI</th>
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<tbody>
<tr>
<td>RSPT 2163</td>
<td>Clinical-Respiratory Therapy 1</td>
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<tr>
<td>RSPT 2166</td>
<td>Practicum (or Field Experience)-Respiratory Therapy 1</td>
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</table>

Minimum Hours Required 72

+Elective - may be selected from the following:

| ARTS 1301 | Art Appreciation | 3 |
| DRAM 1310 | Introduction to the Theater | 3 |
| MUSI 1306 | Music Appreciation | 3 |
| PHIL 1301 | Introduction to Philosophy | 3 |
| HUMA 1301 | Introduction to Humanities | 3 |

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

263
SEMICONDUCTOR
MANUFACTURING –
EQUIPMENT TECHNICIAN

Richland only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.SEMICONDUC.MANUF

Richland College has partnered with Collin County Community College and industry to develop this program for students who are interested in working for companies who use the latest equipment and the latest technological developments in the field of semiconductors. The increasing demand for semiconductor products challenges the industry to find the highly skilled and knowledgeable technicians needed in semiconductor manufacturing. This program has been designed to provide the student with the skills to perform technical duties associated with the installation, repair, maintenance and calibration of equipment used for the manufacture and test of semiconductor products.

CREDIT HOURS

SEMESTER I

ENGL 1301 Composition I ....................... 3
MATH 1414 College Algebra OR .................. 4
TECM 1341 Technical Algebra .................... (3)
ENTC 1445 Fluid Power ......................... 4
CETT 1403DC Circuits ......................... 4
SMFT 1343 Semiconductor Manufacturing Technology I .................. 3

SEMESTER II

PSYC 2302 Applied Psychology .................. 3
MATH 1316 Plane Trigonometry OR ............... 3
TECM 1317 Technical Trigonometry ............. (3)
PHYS 1407 Concepts in Physics ................ 4
CETT 1405AC Circuits .......................... 4

SEMESTER III

CHEM 1405 Introductory Chemistry I .............. 4
ENTC 1380 Cooperative Education - Engineering Technology/Technician, General OR .................. 3
QCTC 1343 Quality Assurance ................... (3)

SEMESTER IV

INTC 1307 Electronic Test Equipment ............. 3
CETT 1429 Solid State Devices ................... 4
CETT 1425 Digital Fundamentals .................. 4
SPCH 1311 Introduction to Speech Communication .................. 3
+Elective Humanities/Fine Arts ................ 17

SEMESTER V

CETT 2337 Microcomputer Control ................ 3
INMT 1447 Industrial Automation ................ 4
CETT 1457 Linear Integrated Circuits ........... 4
SMFT 2343 Semiconductor Manufacturing Technology II OR .................. 3
ENTC 2380 Cooperative Education - Engineering Technology/Technician, General .................. (3)

Minimum Hours Required .................. 69-70

+Select Humanities/Fine Arts elective from the DCCC approved courses.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
SEMICONDUCTOR MANUFACTURING -- OPERATOR

Richland only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.SEMICOND.MANUF

Richland College has partnered with Collin County Community College and industry to develop this certificate program for students who are interested in working for companies who use the latest equipment and the latest technological developments in the field of semiconductors. This program has been designed to provide the student with the skills to operate equipment used in the semiconductor manufacturing process.

CREDIT HOURS

SEMESTER I
ENGL 1301 Composition I .............................. 3
MATH 1414 College Algebra OR ................. 4
TECM 1341 Technical Algebra .................. 4
ENTC 1445 Fluid Power ......................... 4
CETT 1403DC Circuits ....................... 4
SMFT 1343 Semiconductor Manufacturing Technology I ....................... 3
17-18

SEMESTER II
PSYC 2302 Applied Psychology ....................... 3
MATH 1316 Plane Trigonometry OR ........... 3
TECM 1317 Technical Trigonometry ........ 3
PHYS 1407 Concepts in Physics ...................... 4
CETT 1405AC Circuits ............................ 4

SEMESTER III
CHEM 1405 Introductory Chemistry I ............... 4
ENTC 1380 Cooperative Education – Engineering Technology/Technician,
General OR ........................................ 3
QCTC 1343 Quality Assurance ...................... 3

Minimum Hours Required ........................................... 38-39

SMALL BUSINESS ACADEMY

El Centro only

(Level I Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.SMALL.BUS.ACAD

This is a 15 semester credit hour Level I Certificate Program in entrepreneurship. Graduates of this program receive instruction underwritten by the REAL (Rural Entrepreneurship through Action Learning) National and State Organizations. The program is designed to teach foundational business competencies which will provide learners with the knowledge and practical skills to plan, start and run their own business.

Coursework in Accounting, Business Law and Computer Information Systems enhance the emphasized skills in entrepreneurship; life skills, opportunity identification, opportunity evaluation, and opportunity realization. Instruction focuses on such topics as financial feasibility, products and services, marketing, operations legal and ethical issues, and attracting customers. Students will keep journals, make oral presentations and construct a business plan which they can apply in their own community.

CREDIT HOURS

SEMESTER I
BUSG 2309 Small Business Management ........... 3
ACNT 1303 Introduction to Accounting I ........... 3

SEMESTER II
BUSG 1315 Small Business Operations ........... 3
BUSI 2301 Business Law .............................. 3

SEMESTER III
ITSW 1392 Special Topics in Management
Information Systems and Business
Data Processing, General ......................... 3

Minimum Hours Required ........................................... 15
SOCIAL WORK ASSOCIATE--
GENERALIST

Eastfield only

(Add associated sciences degree)

Degree Plan Code: AAS.SOC.WORK.GENERAL

The Social Work Associate Program is designed to prepare individuals interested in working with people to obtain entry-level employment in public and private social service agencies. The social service worker is equipped with skills, knowledge, values, and sensitivity to effectively serve human needs in a variety of community settings. Students have the options to select courses that will prepare them to work in general social services or specialized social services for chemical abuse or the aging.

<table>
<thead>
<tr>
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**SEMESTER I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SCWK 1321</td>
<td>Orientation to Social Services</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2311</td>
<td>Interviewing and Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2331</td>
<td>Abnormal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
<td>3</td>
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**SEMESTER II**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SCWK 1313</td>
<td>Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 1301</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>++Elective</td>
<td>Social Work</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1319</td>
<td>Introduction to Alcohol and Other Drug Addictions</td>
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**SEMESTER III**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SCWK 2301</td>
<td>Assessment and Case Management</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 1305</td>
<td>Group Work Intervention</td>
<td>3</td>
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<tr>
<td>SCWK 1364</td>
<td>Practicum (or Field Experience) -- Social Work OR</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 1365</td>
<td>Practicum (or Field Experience) -- Social Work</td>
<td>3</td>
</tr>
<tr>
<td>CMSW 1405</td>
<td>Nursing Home Activity Director</td>
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</tr>
<tr>
<td>++Elective</td>
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<td>3-4</td>
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**SEMESTER IV**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>SCWK 2307</td>
<td>Human Behavior and the Social Environment</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 1365</td>
<td>Practicum (or Field Experience) -- Social Work OR</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 2366</td>
<td>Practicum (or Field Experience) -- Alcohol/Drug Abuse Counseling</td>
<td>(3)</td>
</tr>
<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 1411</td>
<td>Beginning Spanish OR</td>
<td>4</td>
</tr>
<tr>
<td>++Elective</td>
<td>Humanities/Fine Arts</td>
<td>(3)</td>
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Minimum Hours Required: 62-64

+ Math course must be selected from the following:

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<td>MATH 1332</td>
<td>College Mathematics I</td>
<td>3</td>
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<tr>
<td>MATH 1342</td>
<td>Introductory Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra</td>
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<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
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++ Social Work Electives must be selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DAAC 1304</td>
<td>Pharmacology of Addiction</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1307</td>
<td>Addicted Family Intervention</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1311</td>
<td>Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1341</td>
<td>Counseling Alcohol and Other Drug Addictions</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1342</td>
<td>Current Issues</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 1301</td>
<td>Adolescent Life Cycle</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2305</td>
<td>Special Problems of Youth</td>
<td>3</td>
</tr>
<tr>
<td>CMSW 1505</td>
<td>Nursing Home Activity Director</td>
<td>5</td>
</tr>
<tr>
<td>GERS 1301</td>
<td>Introduction to Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>GERS 1392</td>
<td>Special Topics in Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>CMSW 1353</td>
<td>Families Intervention Strategies</td>
<td>3</td>
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+++ Approved Humanities Electives must be selected from the following:

<table>
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<th>Course Title</th>
<th>Credit Hours</th>
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<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities</td>
<td>3</td>
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<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
<td>3</td>
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<tr>
<td>PHIL 1370</td>
<td>Critical Thinking</td>
<td>3</td>
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<tr>
<td>PHIL 2303</td>
<td>Logic</td>
<td>3</td>
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<tr>
<td>PHIL 2306</td>
<td>Ethics</td>
<td>3</td>
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NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
SOCIAL WORK--HUMAN SERVICES

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.SWAT.HUMAN.SERV

This certificate is designed to assist associate degree majors in Child Development and Interpreter Training to obtain cross training in the delivery of human services to clients. Students will choose a concentration in either Child Development or Interpreter Training along with Social Work courses. The certificate will provide majors in these programs to enhance their skills in meeting the social service needs for these populations.

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**SEMESTER I**

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<th>Code</th>
<th>Title</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>SCWK 1321</td>
<td>Orientation to Social Services ..........</td>
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</tr>
<tr>
<td>SCWK 2311</td>
<td>Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2331</td>
<td>Abnormal Behavior</td>
<td>3</td>
</tr>
<tr>
<td>GERS 1301</td>
<td>Introduction to Gerontology</td>
<td>3</td>
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<tr>
<td>CMSW 1405</td>
<td>Nursing Home Activity Director .....</td>
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**SEMESTER II**

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<tr>
<td>SCWK 2307</td>
<td>Human Behavior and the Social Environment ..........</td>
<td>3</td>
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<tr>
<td>SCWK 1365</td>
<td>Practicum (or Field Experience) -- Social Work ..........</td>
<td>3</td>
</tr>
<tr>
<td>GERS 1392</td>
<td>Special Topics in Gerontology ..........</td>
<td>3</td>
</tr>
<tr>
<td>CMSW 1505</td>
<td>Nursing Home Activity Director .....</td>
<td>5</td>
</tr>
<tr>
<td>CMSW 1353</td>
<td>Families Intervention Strategies ..........</td>
<td>3</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication ..........</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Hours Required ........................................ 39
The Substance Abuse Counseling Program is designed to prepare qualified and competent graduates to enter the field of human services and to provide specialized services to individuals and their families who are experiencing the affects of substance abuse. Completers of the program will have the necessary educational requirements to become eligible for testing and licensure as a Licensed Chemical Dependency Counselor (LCDC) and certification as an Alcohol and Drug Counselor (ADC). Students will gain required work experience as Counselor Interns (CI) upon completion of the required hours of classroom instruction. A special section of cooperative work experience will provide a structured supervised practicum in off-campus approved laboratory training sites.

CREDIT HOURS

SEMMESTER I
SCWK 1321 Orientation to Social Services .......... 3
SCWK 2311 Interviewing and Counseling Theories .......... 3
DAAC 1304 Pharmacology of Addiction .......... 3
ENGL 1301 Composition I .......... 3
MATH 1314 College Algebra OR .......... 3
MATH 1414 College Algebra OR .......... 4
MATH 1342 Introductory Statistics .......... 3
15-16

SEMMESTER II
DAAC 1311 Counseling Theories .......... 3
SCWK 2301 Assessment and Case Management .......... 3
PSYC 2301 Introduction to Psychology .......... 3
SPCH 1311 Introduction to Speech Communication .......... 3
SOCl 1301 Introduction to Sociology .......... 3
15

SEMMESTER III
DAAC 1319 Introduction to Alcohol and Other Drug Addictions .......... 3
DAAC 1307 Addicted Family Intervention .......... 3
SCWK 1301 Adolescent Life Cycle OR .......... 3
SCWK 2305 Special Problems of Youth .......... 3
SCWK 1305 Group Work Intervention .......... 3
SCWK 1365 Practicum (or Field Experience) - Social Work .......... 3
Elective Any Non-DAAC or Non-SCWK course .......... 3
18

SEMMESTER IV
DAAC 1341 Counseling Alcohol and Other Drug Addictions OR .......... 3
+ Elective .......... 3
DAAC 1343 Current Issues OR .......... 3
++ Elective (3)
DAAC 2366 Practicum (or Field Experience) - Alcohol/Drug Abuse Counseling .......... 3
ITSC 1401 Introduction to Computers .......... 4
SPAN 1411 Beginning Spanish OR .......... 4
+++ Elective Humanities/Fine Arts .......... 3
20

Minimum Hours Required .......... 68-69

+ Social Work electives must be selected from the following:
SCWK 2331 Abnormal Behavior .......... 3
SCWK 1313 Introduction to Social Work .......... 3
CMSW 1327 Treatment Modalities with Special Populations .......... 3
SCWK 2307 Human Behavior and the Social Environment .......... 3

++ Electives must be selected from the following:
PSYC 2306 Human Sexuality .......... 3
PSYC 2314 Developmental Psychology .......... 3
PSYC 2316 Psychology of Personality .......... 3
SOCl 2306 Human Sexuality .......... 3

+++ Approved Humanities Electives must be selected from the following:
HUMA 1301 Introduction to the Humanities .......... 3
PHIL 1301 Introduction to Philosophy .......... 3
PHIL 1370 Critical Thinking .......... 3
PHIL 2303 Logic .......... 3
PHIL 2306 Ethics .......... 3
PHIL 2307 Introduction to Social and Political Philosophy .......... 3

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
SUBSTANCE ABUSE COUNSELING

Eastfield only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.SWAT.SUB.ABUSE

The Substance Abuse Counseling certificate is designed to provide cross-training for helping professionals in other disciplines, i.e. bachelor and master level social workers, counselors, psychologists, nurses, criminal justices, etc. It also trains students for employment as therapy technicians with the Counselor Intern certification. After completing two years' work experience in an organization that serves the substance dependent individual, students may qualify for testing as a Licensed Chemical Dependency Counselor (LCDC) and certified as an Alcohol and Drug Counselor (ADC).

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</table>

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>SCWK 1321</td>
<td>Orientation to Social Services</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2311</td>
<td>Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1304</td>
<td>Pharmacology of Addiction</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1341</td>
<td>Counseling Alcohol and Other Drug Addictions OR</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1319</td>
<td>Introduction to Alcohol and Other Drug Addictions</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
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Total Credit Hours: 15

**SEMESTER II**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>DAAC 1311</td>
<td>Counseling Theories</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1307</td>
<td>Addicted Family Intervention</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 1343</td>
<td>Current Issues</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 2301</td>
<td>Assessment and Case Management</td>
<td>3</td>
</tr>
<tr>
<td>SCWK 1305</td>
<td>Group Work Intervention</td>
<td>3</td>
</tr>
<tr>
<td>DAAC 2366</td>
<td>Practicum (or Field Experience) - Alcohol/ Drug</td>
<td>18</td>
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<td></td>
<td>Abuse Counseling</td>
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</tr>
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</table>

Minimum Hours Required: 33
SURGICAL TECHNOLOGIST

El Centro only

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.SGTC.TECHNOLOGY

The Surgical Technologist program is one-year in length and offers the student a learning opportunity to provide patient services in the operating room setting under the supervision of the operating room director. The Surgical Technologist, as a part of the operating team, aids in providing safe and efficient patient care. The technologist prepares the instruments, supplies and equipment for use at the operating room table and assists in the use of these materials during surgical procedures.

The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP, 35 East Wacker Drive, Suite 1970, Chicago, Illinois 60601-2208: Telephone number 312-553-9355) in cooperation with the Accreditation Review Committee for Educational Programs in Surgical Technology (ARC-ST, 7108-C South Alton Way, Englewood, Colorado 80112: Telephone number 303-694-9262).

ADMISSION TO THE PROGRAM:

Admission requirements include:

1. Completion of all requirements for admission as a full-time student to the college.
2. High school diploma or GED.
3. Satisfactory scores on assessment exams.
4. An information session.
5. Must complete prerequisites to program with a 2.5 G.P.A. or better.
6. Must have a G.P.A. of 2.5 or better from previous college courses. Developmental course grades are not included in the G.P.A. calculation.
7. Applicants are rank ordered for admission based on the grade point average earned on five prerequisite courses.

Contact the Assessment Center at El Centro College to schedule the assessment exam. Call Health Occupational Admissions, (214) 860-2272, to receive an information packet.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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<table>
<thead>
<tr>
<th>SEMESTER I</th>
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</thead>
<tbody>
<tr>
<td>SRGT 1405</td>
<td>Introduction to Surgical Technology: 4</td>
</tr>
<tr>
<td>SRGT 1409</td>
<td>Fundamentals of Aseptic Technique: 4</td>
</tr>
<tr>
<td>SRGT 1166</td>
<td>Practicum (or Field Experience) - Surgical/Operating Room Technician: 1</td>
</tr>
<tr>
<td>HPRS 2300</td>
<td>Pharmacology for Health Professions: 3</td>
</tr>
<tr>
<td>BIOL 1472</td>
<td>Introduction to Human Anatomy and Physiology: 4</td>
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<table>
<thead>
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<th>SEMESTER II</th>
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<tbody>
<tr>
<td>SRGT 1441</td>
<td>Surgical Procedures I: 4</td>
</tr>
<tr>
<td>SRGT 1442</td>
<td>Surgical Procedures II: 4</td>
</tr>
<tr>
<td>SRGT 1367</td>
<td>Practicum (or Field Experience) - Surgical/Operating Room Technician: 3</td>
</tr>
<tr>
<td>HPRS 1202</td>
<td>Wellness and Health Promotion: 2</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
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<tbody>
<tr>
<td>SRGT 2266</td>
<td>Practicum (or Field Experience) - Surgical/Operating Room Technician: 2</td>
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<tr>
<td>SRGT 2171</td>
<td>Surgical Technologist - Seminar: 1</td>
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Minimum Hours Required: 46

# BIOL 1406 is recommended prior to BIOL 1470 if no previous high school Biology.

# # Support courses may be completed before, but not after, the semester indicated.

A "C" grade or better is required in all courses.

Note: Pending approval, curriculum changes will affect students admitted Fall 2000.
TRAVEL, EXPOSITION AND MEETING
MANAGEMENT

Richland only

(associate in Applied Sciences Degree, Tech Prep Enhanced Skills)

Degree Plan Code: AAS.TRAVEL.TOUR.MGMT

This program is designed to develop the necessary knowledge and skills so that a graduate may advance in career paths appropriate to an individual's particular interests, in the travel and tourism industry. Individual areas of specialization include: (a) convention/meeting planner, (b) exposition/trade show planner, or (c) travel agency operations. In addition to specific technical skills and knowledge related to the travel and tourism field, the graduate will have received instruction in other areas such as principles of management, applied mathematics, reading and writing skills, and verbal communication skills.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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</thead>
<tbody>
<tr>
<td>ENGL 1301 Composition I 3</td>
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</tr>
<tr>
<td>TRVM 1300 Introduction to Travel and Tourism 3</td>
<td></td>
</tr>
<tr>
<td>TRVM 2301 Introduction to Convention/Meeting Management 3</td>
<td></td>
</tr>
<tr>
<td>TRVM 1308 Travel Destinations I - Western Hemisphere 3</td>
<td></td>
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<tr>
<td>POFT 1127 Introduction to Keyboarding 1</td>
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<thead>
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<tbody>
<tr>
<td>ENGL 1302 Composition II 3</td>
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<tr>
<td>POFT 1321 Business Math AND 3</td>
<td></td>
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<tr>
<td>ECOL 1305 People and Their Environment OR 3</td>
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<tr>
<td>MATH 1332 College Mathematics I (3)</td>
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<tr>
<td>ITSC 1401 Introduction to Computers 4</td>
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</tr>
<tr>
<td>TRVM 1325 Exposition and Trade Show Management 3</td>
<td></td>
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<tr>
<td>TRVM XXXX Specialization Course 3</td>
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<tr>
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<tbody>
<tr>
<td>SPCH 1311 Introduction to Speech Communication 3</td>
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<tr>
<td>TRVM 1291 Special Topics in Travel and Tourism 2</td>
<td></td>
</tr>
<tr>
<td>TRVM 1345 Travel and Tourism Sales and Marketing Techniques 3</td>
<td></td>
</tr>
<tr>
<td>TRVM 1341 Travel Destinations II - Eastern Hemisphere 3</td>
<td></td>
</tr>
<tr>
<td>+Elective Humanities/Fine Arts 3-4</td>
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<table>
<thead>
<tr>
<th>SEMESTER IV</th>
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<tbody>
<tr>
<td>++Elective Management Elective 3</td>
<td></td>
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<tr>
<td>SOCI 1301 Introduction to Sociology OR 3</td>
<td></td>
</tr>
<tr>
<td>PSYC 2301 Introduction to Psychology OR (3)</td>
<td></td>
</tr>
<tr>
<td>HDEV 2315 Principles and Process of Personal And Social Adjustment (3)</td>
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<tr>
<td>TRVM 2331 Convention and Exposition Law and Ethics 3</td>
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</tr>
<tr>
<td>+++TRVM XXXX Special Topics Elective OR 1-4</td>
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<tr>
<td>++++TRVM XXXX Practicum Elective (1-2)</td>
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<tr>
<td>TRVM XXXX Specialization Course 3</td>
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<td>+Elective Humanities/Fine Arts 3-4</td>
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<table>
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<tr>
<th>SEMESTER V</th>
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<tbody>
<tr>
<td>TRVM 2360 Cooperative Education in Travel and Tourism 3</td>
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</table>

Minimum Hours Required 65-70

+ Humanities/Fine Arts electives may be selected from the following:

<table>
<thead>
<tr>
<th>ARTS 1301</th>
<th>Art Appreciation 3</th>
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</thead>
<tbody>
<tr>
<td>ENGL 2332</td>
<td>World Literature 3</td>
</tr>
<tr>
<td>HIST 2321</td>
<td>World Civilizations 3</td>
</tr>
<tr>
<td>HIST 2322</td>
<td>World Civilizations 3</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities 3</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation 3</td>
</tr>
<tr>
<td>PHIL 1370</td>
<td>Critical Thinking 3</td>
</tr>
<tr>
<td>FREN 1411</td>
<td>Beginning French 4</td>
</tr>
<tr>
<td>FREN 1412</td>
<td>Beginning French 4</td>
</tr>
<tr>
<td>GERM 1411</td>
<td>Beginning German 4</td>
</tr>
<tr>
<td>GERM 1412</td>
<td>Beginning German 4</td>
</tr>
<tr>
<td>JAPN 1411</td>
<td>Beginning Japanese 4</td>
</tr>
<tr>
<td>JAPN 1412</td>
<td>Beginning Japanese 4</td>
</tr>
<tr>
<td>PORT 1411</td>
<td>Beginning Portuguese 4</td>
</tr>
<tr>
<td>PORT 1412</td>
<td>Beginning Portuguese 4</td>
</tr>
<tr>
<td>SPAN 1411</td>
<td>Beginning Spanish 4</td>
</tr>
<tr>
<td>SPAN 1412</td>
<td>Beginning Spanish 4</td>
</tr>
</tbody>
</table>

(continued on next page)
Management elective must be selected from the following:

BMGT 1303 Principles of Management .................. 3
BUSG 2309 Small Business Management ................. 3
HRPO 2307 Organizational Behavior .................... 3

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.

SPECIALIZATION COURSES:

Meeting and Convention Management
TRVM 2333 Applied Convention/Meetings Management .. 3
TRVM 2341 International Meeting Management .......... 3
TRVM 1327 Hospitality and Special Events .............. 3

Exposition/Trade Show Management
TRVM 2343 Exposition Service Contracting ............... 3
TRVM 2355 Exposition and Trade Show Operations ...... 3

Travel Management
TRVM 1349 Travel Operations I .............................. 3
TRVM 2437 Travel Industry Operations II .................. 3
TRVM 1323 Group Tour Operations .......................... 3
TRVM 1331 Introduction to the Hospitality Industry ...... 3

+++ Special Topics Elective - Students may select one course from the list below or any one of the Specialization Courses listed above.

TRVM 1191 Special Topics in Travel and Tourism ....... 1
TRVM 1291 Special Topics in Travel and Tourism ....... 2
TRVM 1391 Special Topics in Travel and Tourism ....... 3
TRVM 1491 Special Topics in Travel and Tourism ....... 4

++++ Practicum Elective - Students may select one course from the list below.

TRVM 1166 Practicum- Travel and Tourism ............... 1
TRVM 1266 Practicum- Travel and Tourism ............... 2
TRVM 2367 Practicum- Travel and Tourism ............... 3
TRVM 2467 Practicum- Travel and Tourism ............... 4

POFT 1321 Business Math AND ECOL 1305 People and Their Environment OR MATH 1332 College Mathematics I
TECH PREP ENHANCED SKILLS CERTIFICATES

These Enhanced Skills Certificates are attached to the Associate in Applied Sciences Degree in Travel, Exposition and Meeting Management and provides the student advanced skills required by the industry to specialize in Meeting and Convention Management, Exposition/Trade Show Management, and Travel Management.

MEETING AND CONVENTION MANAGEMENT

Richland only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.TRAV.CONVENTION

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>TRVM 2333</td>
<td>Applied Convention/Meetings Management ........................................ 3</td>
</tr>
<tr>
<td>TRVM 2341</td>
<td>International Meeting Management ........................................ 3</td>
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<tr>
<td>TRVM XXXX</td>
<td>Specialization Course ........................................ 3</td>
</tr>
</tbody>
</table>

Minimum Hours Required........................................ 9

EXPOSITION/TRADE SHOW MANAGEMENT

Richland only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.TRAV.EXPO/TRADE

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>TRVM 2343</td>
<td>Exposition Service Contracting ........................................ 3</td>
</tr>
<tr>
<td>TRVM 2355</td>
<td>Exposition and Trade Show Operations ........................................ 3</td>
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<tr>
<td>TRVM XXXX</td>
<td>Specialization Elective ........................................ 3</td>
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</table>

Minimum Hours Required........................................ 9

TRAVEL MANAGEMENT

Richland only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.TRAV.MANAGEMENT

<table>
<thead>
<tr>
<th>SEMESTER I</th>
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<tbody>
<tr>
<td>TRVM 1349</td>
<td>Travel Operations I ........................................ 3</td>
</tr>
<tr>
<td>TRVM 2437</td>
<td>Travel Industry Operations II .................................. 4</td>
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<tr>
<td>TRVM XXXX</td>
<td>Specialization Elective ........................................ 3</td>
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</table>

Minimum Hours Required........................................ 10
**TRAVEL, EXPOSITION AND MEETING MANAGEMENT**

*Richland only*

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.TRAV.MANAGEMENT

This is a thirty-one hour certificate that provides the student with the technical knowledge and practical skills required to work as a travel reservationist or a travel counselor. In addition to basic reservation skills, students will receive instruction in the following topics: (a) effective written/verbal communication, (b) positive work ethics and habits, and (c) basic office clerical activities.

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
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</table>

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>POFT 1321</td>
<td>Business Math AND</td>
<td>3</td>
</tr>
<tr>
<td>ECOL 1305</td>
<td>People and Their Environment OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>College Mathematics I</td>
<td>(3)</td>
</tr>
<tr>
<td>TRVM 1300</td>
<td>Introduction to Travel and Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRVM 1308</td>
<td>Travel Destination I - Western Hemisphere</td>
<td>3</td>
</tr>
<tr>
<td>TRVM 1349</td>
<td>Travel Operations I</td>
<td>3</td>
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<tr>
<td>++TRVM xxxx</td>
<td>Special Topics Elective OR</td>
<td>1-4</td>
</tr>
<tr>
<td>++++TRVM xxxx</td>
<td>Practicum Elective</td>
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**SEMESTER II**

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<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>TRVM 1345</td>
<td>Travel and Tourism Sales and Marketing Techniques</td>
<td>3</td>
</tr>
<tr>
<td>TRVM 2437</td>
<td>Travel Industry Operations II</td>
<td>4</td>
</tr>
<tr>
<td>TRVM 1341</td>
<td>Travel Destinations II - Eastern Hemisphere</td>
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**SEMESTER III**

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<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>TRVM 2380</td>
<td>Cooperative Education in Travel and Tourism</td>
<td>3</td>
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</table>

Minimum Hours Required: 32-35

+Special Topics Elective - Students may select one course from the list below or students may substitute TRVM 2301 Introduction to Convention/Meeting Management or TRVM 1325 Exposition and Trade Show Management for Special Topics Elective:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRVM 1191</td>
<td>Special Topics in Travel and Tourism</td>
<td>1</td>
</tr>
<tr>
<td>TRVM 1291</td>
<td>Special Topics in Travel and Tourism</td>
<td>2</td>
</tr>
<tr>
<td>TRVM 1391</td>
<td>Special Topics in Travel and Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRVM 1491</td>
<td>Special Topics in Travel and Tourism</td>
<td>4</td>
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</table>

++Practicum Elective - Students may select one course from the list below:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>TRVM 1165</td>
<td>Practicum - Travel and Tourism</td>
<td>1</td>
</tr>
<tr>
<td>TRVM 1266</td>
<td>Practicum - Travel and Tourism</td>
<td>2</td>
</tr>
<tr>
<td>TRVM 2367</td>
<td>Practicum - Travel and Tourism</td>
<td>3</td>
</tr>
<tr>
<td>TRVM 2467</td>
<td>Practicum - Travel and Tourism</td>
<td>4</td>
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</table>

1 POFT 1321 Business Math AND ECOL 1305 People and Their Environment or MATH 1332 College Mathematics.
**VETERINARY TECHNOLOGY**

_Cedar Valley only_

(Associate in Applied Sciences Degree)

Degree Plan Code: AAS.VETERINARY.TECH

This program is designed to help meet the need for graduate veterinary technicians as indicated by the American Veterinary Medical Association. The graduate serves primarily as an assistant to veterinarians in private practice, functions in biological research or serves to meet the needs of allied health industries.

The Veterinary Technology curriculum is designed to provide the graduate with information, experience and skills needed to perform all technical duties in a practice, excluding diagnosis, prescribing and surgery. The Veterinary Technology program is accredited by the Committee on Animal Technician Activities and Training of the American Veterinary Medical Association and graduates are qualified to take the Texas Veterinary Medical Association Examination to become a Registered Veterinary Technician (RVT).

Admission to the Veterinary Technology program is limited and applicants should be assessed and advised prior to enrolling in the program. Students are encouraged to have a good academic background in English, mathematics, and the biological sciences.

<table>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td><strong>PREREQUISITE TO PROGRAM ADMISSION</strong></td>
</tr>
<tr>
<td>BIOL 1406 General Biology</td>
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<tr>
<td>ENGL 1301 Composition I</td>
</tr>
<tr>
<td>MATH 1373 Applied Mathematics OR</td>
</tr>
<tr>
<td>MATH 1314 College Algebra</td>
</tr>
<tr>
<td>SPCH 1311 Introduction to Speech Communication</td>
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<tr>
<td><strong>SEMESTER I</strong></td>
</tr>
<tr>
<td>VTHT 1105 Veterinary Medical Terminology</td>
</tr>
<tr>
<td>VTHT 1401 Introduction to Veterinary Technology</td>
</tr>
<tr>
<td>VTHT 1413 Veterinary Anatomy and Physiology</td>
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<tr>
<td>VTHT 2321 Veterinary Parasitology</td>
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<tr>
<td><strong>SEMESTER II</strong></td>
</tr>
<tr>
<td>VTHT 2201 Canine and Feline Clinical Management</td>
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<tr>
<td>VTHT 2435 Advanced Veterinary Anatomy and Physiology</td>
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<tr>
<td>VTHT 1317 Veterinary Office Management</td>
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<tr>
<td>VTHT 2323 Veterinary Clinical Pathology I</td>
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<tr>
<td><strong>SEMESTER III (Summer Session)</strong></td>
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<tr>
<td>VTHT 1349 Veterinary Pharmacology</td>
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<tr>
<td>VTHT 2331 Veterinary Clinical Pathology II</td>
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<tr>
<td><strong>SEMESTER IV</strong></td>
</tr>
<tr>
<td>VTHT 1341 Anesthesia and Surgical Assistance</td>
</tr>
<tr>
<td>VTHT 2425 Large Animal Assisting Techniques</td>
</tr>
<tr>
<td>VTHT 2213 Lab Animal Clinical Management</td>
</tr>
<tr>
<td>VTHT 2205 Equine Clinical Management</td>
</tr>
<tr>
<td>+ Elective Humanities/Fine Arts</td>
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<td><strong>SEMESTER V</strong></td>
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<tr>
<td>VTHT 2209 Food Animal Clinical Management</td>
</tr>
<tr>
<td>VTHT 1345 Veterinary Radiology</td>
</tr>
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<td>VTHT 2439 Veterinary Nursing Care</td>
</tr>
<tr>
<td>+ Elective Behavioral/Social Sciences</td>
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<tr>
<td><strong>SEMESTER VI</strong></td>
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<tr>
<td>VTHT 2380 Cooperative Education - Veterinarian Assistant/Animal Health Technician</td>
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<td><strong>Minimum Hours Required</strong></td>
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<td>+ Humanities/Fine Arts Electives:</td>
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<tr>
<td>ARTS 1301 Art Appreciation</td>
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<tr>
<td>Foreign Language or American Sign Language</td>
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<td>HUMA 1301 Introduction to Humanities</td>
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<td>MUSI 1306 Music Appreciation</td>
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<td>PHIL 1301 Introduction to Philosophy</td>
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<tr>
<td>DRAM 1310 Introduction to Theater</td>
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<tr>
<td>ENGL 2000 Level Literature</td>
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<td>+ Behavioral/Social Sciences Electives:</td>
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<td>ANTH 2346 Introduction to Anthropology</td>
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<td>ECON 2301 Principles of Economics</td>
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<td>GOVT 2301 American Government</td>
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<td>HIST 1301 History of the United States</td>
</tr>
<tr>
<td>PSYC 2302 Applied Psychology</td>
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<tr>
<td>SOCI 1301 Introduction to Sociology</td>
</tr>
</tbody>
</table>

☐ This course has been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a 4 year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
VETERINARY TECHNOLOGY --
VETERINARY ASSISTING

_Cedar Valley only_

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: C1.VETT.ASSISTING

Veterinary Assistants are an integral part of the veterinary health team. Individuals in this position assist both the veterinarian and the veterinary technician in performing veterinary procedures in clinical settings as well as in research areas and other veterinary related fields. Students in this program can continue their studies in the Veterinary Technology program to attain the Associate Degree in Veterinary Technology.

The curriculum is designed to provide the graduate with the information, experience, and skills needed to perform all veterinary assistant duties in a practice. Admission to the Veterinary Technology program and the Veterinary Assisting certificate program is limited. Applicants should be assessed and advised prior to enrolling in the program. Students are encouraged to have a good background in English, mathematics and the biological sciences.

<table>
<thead>
<tr>
<th>CREDIT</th>
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</thead>
<tbody>
<tr>
<td>HOURS</td>
</tr>
</tbody>
</table>

**SEMESTER I**

+ Elective Humanities/Fine Arts .......................... 3  
++ Elective Natural Science and Math .......................... 3  
VTHT 1105 Veterinary Medical Terminology .......................... 1  
VTHT 1401 Introduction to Veterinary Technology .......................... 4  

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>BIOL 1406 General Biology ........................................ 4</td>
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<tr>
<td>VTHT 2201 Canine and Feline Clinical Management ...................... 2</td>
<td></td>
</tr>
<tr>
<td>VTHT 2323 Veterinary Clinical Pathology I ................................ 3</td>
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Minimum Hours Required ........................................... 20

+ Humanities/Fine Arts Elective must be selected from:

<p>| | |</p>
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<tbody>
<tr>
<td>ENGL 1301 Composition I OR ........................................ 3</td>
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<td>SPCH 1311 Introduction to Speech Communication ...................... 3</td>
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++ Natural Science and Math Elective must be selected from:

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<tr>
<td>MATH 1373 Applied Mathematics OR .................................... 3</td>
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<tr>
<td>MATH 1314 College Algebra ........................................... 3</td>
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</table>

☐ This course has been or will be revised effective, Fall 2000.
VIDEO TECHNOLOGY

North Lake only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.VIDEO.TECH

The Video Technology program is designed to prepare students for entry level or advanced employment in the video industry. Opportunities in medicine, entertainment, advertising, industry, broadcast, cable, education, military, government, and business are among the career options. Students will develop skills and knowledge necessary to plan, budget, produce, and perform post-production of various video projects.

SEMESTER I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>RTVB 1305</td>
<td>Introduction to Television Technology</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 1371</td>
<td>Television Lighting</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 1321</td>
<td>TV Field Production</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1301</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1414</td>
<td>College Algebra OR</td>
<td>4</td>
</tr>
<tr>
<td>TECM 1341</td>
<td>Technical Algebra AND</td>
<td>3</td>
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<tr>
<td>+Elective</td>
<td>Natural Science</td>
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SEMESTER II

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<tr>
<td>RTVB 1409</td>
<td>Audio/Radio Production I</td>
<td>4</td>
</tr>
<tr>
<td>RTVB 2335</td>
<td>TV Production</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1451</td>
<td>Digital Video</td>
<td>4</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>Social/Behavioral Science</td>
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SEMESTER III

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<tr>
<td>RTVB 1345</td>
<td>Broadcast Engineering</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 2437</td>
<td>TV Production Workshop I</td>
<td>4</td>
</tr>
<tr>
<td>HUMA 1301</td>
<td>Introduction to the Humanities OR</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation OR</td>
<td>3</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>+Elective</td>
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SEMESTER IV

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<tr>
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<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>FLMC 1331</td>
<td>Computers in Video Production I</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 2455</td>
<td>TV Production Workshop II</td>
<td>4</td>
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<tr>
<td>RTVB 2382</td>
<td>Cooperative Education – Radio and Television Broadcasting Technology/Technician</td>
<td>3</td>
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<tr>
<td>ITSC 1401</td>
<td>Introduction to Computers</td>
<td>3-4</td>
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Minimum Hours Required: 65-71

Elective - must be selected from the following:

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<td>FLMC 1331</td>
<td>Computers in Video Production I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1301</td>
<td>Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>IMED 1305</td>
<td>Multimedia Authoring I</td>
<td>3</td>
</tr>
<tr>
<td>IMED 2311</td>
<td>Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 1317</td>
<td>Survey of Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 1329</td>
<td>Writing for Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 1391</td>
<td>Special Topics in Radio and Television Broadcasting</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 2345</td>
<td>Advanced Broadcast Engineering</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 2347</td>
<td>Management and Operation of Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 2383</td>
<td>Cooperative Education – Radio and Television Broadcasting Technology/Technician</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 2455</td>
<td>TV Production Workshop II</td>
<td>4</td>
</tr>
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</table>

Elective - one of the following Natural Science courses may be taken:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL 1406</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>ECOL 1305</td>
<td>People and Their Environment</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1403</td>
<td>Physical Geology</td>
<td>4</td>
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<tr>
<td>PHYS 1311</td>
<td>Descriptive Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1401</td>
<td>Introductory General Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1415</td>
<td>Physical Science</td>
<td>4</td>
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</table>
TECH PREP ENHANCED SKILLS
CERTIFICATE

VIDEO TECHNOLOGY

North Lake only

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: ES.VIDEO.TECH

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>RTVB 2335 TV Production</td>
<td>3</td>
</tr>
<tr>
<td>RTVB 1321 TV Field Production</td>
<td>3</td>
</tr>
<tr>
<td>ITSC 1401 Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10</td>
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</table>

Minimum Hours Required ............... 10

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
VIDEO TECHNOLOGY–MULTIMEDIA
SPECIALIST

North Lake only

(Certificate)

(Students pursuing this certificate program are waived from TASP requirements.)

Degree Plan Code: CERT.RFTV.MULTIMEDIA

This multi-disciplinary program prepares students for the exciting field of multi-media production. Students will study in Art, Photography, Computer Information Systems, and Video Technology. Upon completion of this certificate, students will be equipped to produce, design, author, shoot and edit a complete interactive multi-media project, and then press it to a CD-ROM for distribution and permanent storage.

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>IMED 1301</td>
<td>Introduction to Multimedia 3</td>
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<tr>
<td>ENGL 1301</td>
<td>Composition I 3</td>
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<tr>
<td>ARTS 2313</td>
<td>Computer Graphics Design I 3</td>
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<tr>
<td>+Elective</td>
<td>3-4</td>
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<td>12-13</td>
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<table>
<thead>
<tr>
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<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>IMED 1305</td>
<td>Advanced Multimedia I 3</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication 3</td>
</tr>
<tr>
<td>PHTC 1349</td>
<td>Photo Digital Imaging I OR</td>
</tr>
<tr>
<td>POFI 1345</td>
<td>Integrated Software Applications II 3</td>
</tr>
<tr>
<td>+Elective</td>
<td>3-4</td>
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<tr>
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<td>12-13</td>
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<table>
<thead>
<tr>
<th>SEMESTER III</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLMC 1331</td>
<td>Computers in Video Production I 3</td>
</tr>
<tr>
<td>IMED 2311</td>
<td>Portfolio Development 3</td>
</tr>
<tr>
<td>+Elective</td>
<td>3-4</td>
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<td></td>
<td>9-10</td>
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</table>

Minimum Hours Required: 33-36

+Electives should be chosen from the following:

- ARTS 1311 2D Design ........................................ 3
- ARTS 2314 Computer Graphics Design II .................. 3
- MUSI 1172 Synthesizer Class II .......................... 1
- ITSE 1402 Introduction to Computer Programming ....... 4
- ITSE 1391 Special Topics in Computer Programming ...... 3
- POFI 2331 Desktop Publishing for the Office .......... 3
- PHOT 1316 Introduction to Photography and Photojournalism 3
- RTVB 2335 TV Production .................................. 3
- RTVB 1321 TV Field Production .......................... 3
- RTVB 1409 Audio/Radio Production I .................... 4
The Visual Communications first year core curriculum of study is designed to provide the student with basic foundation knowledge and technical skills required for various fields within the visual communications industry. Completion of the Visual Communications Core Curriculum earns a Certificate in Visual Communications and enables the student to enter a specialized track of study of either Communication Design, Multimedia Communications, Illustration, or Prepress Production. Upon completion of the second year courses, an Associate in Applied Sciences Degree is awarded. Please contact the Registrar's Office for complete information. The complete course of study provides for the development of creative, conceptual, technical, interpersonal and communication skills necessary to a career within the visual communications industry. Each specialized area of study is described as follows:

**Specialization in Communication Design**
This course of study is designed to prepare the student to enter the graphic design, advertising art, desktop publishing, and print production fields. Emphasis is upon concept development and technical skills for visual communication.

**Specialization in Multimedia Communications**
This course of study is designed to develop the skills and technical knowledge to enable students to create multimedia presentations. Emphasis is upon development of concept and design for multimedia communications and presentation materials.

**Specialization in Illustration**
This course of study is designed to develop the skills, attitudes and professionalism to enable students to enter the field of illustration. Emphasis is upon the conceptual, creative and technical skills to begin a career as an illustrator within the advertising and publishing fields of the visual communication industry.

**Specialization in Prepress Production**
This course of study prepares the student to enter the print pre-press production field. Emphasis is upon the technical aspects of preparing electronic files for output to a digital press or to film for offset printing.

### Credit Hours

<table>
<thead>
<tr>
<th>SEMESTER I</th>
<th>SEMESTER II</th>
<th>SEMESTER III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARTC 1305</strong> Basic Graphic Design .......... 3</td>
<td><strong>ARTC 1317</strong> Design Communication I .......... 3</td>
<td><strong>MATH 1314</strong> College Algebra OR ................. 3</td>
</tr>
<tr>
<td><strong>ARTC 2305</strong> Digital Painting and Imaging .......... 3</td>
<td><strong>GRPH 1359</strong> Object Oriented Computer Graphics ........ 3</td>
<td><strong>POFT 1321</strong> Business Math AND .................. (3)</td>
</tr>
<tr>
<td><strong>ARTC 2311</strong> History of Communication Graphics ........ 3</td>
<td><strong>ARTC 1309</strong> Basic Illustration .................. 3</td>
<td>+Elective: Lab Science ............................. (3-4)</td>
</tr>
<tr>
<td><strong>ARTS 1316</strong> Drawing ......................... 3</td>
<td><strong>IMED 1316</strong> Web Page Design I ................ 3</td>
<td>++Elective: Social/Behavioral Science ............... 3</td>
</tr>
<tr>
<td><strong>ENGL 1301</strong> Composition ...................... 3</td>
<td><strong>SPCH 1311</strong> Introduction to Speech Communication .... 3</td>
<td><strong>Minimum Hours Required</strong> ....................... 36-40</td>
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</table>

**CREDIT HOURS**

+Elective: POFT 1321 Business Math may be taken only when a science course is taken as well. Select natural science course from BIOL, CHEM, GEOL, or PHYS.

++Elective: Any Social/Behavioral Science class. Select course from ANTH, ECON, GEOG, GOVT, HIST, PSYC, or SOCI.
VISUAL COMMUNICATIONS

Brookhaven only

(Associate in Applied Sciences Degree, Tech Prep Enhanced Skills Certificate)

Degree Plan Code: AAS.VISUAL.COMM

SEMESTERS I, II, III
Visual Communications Core Curriculum .......... 36-40

SEMESTER IV

<table>
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<tr>
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<td>3</td>
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<tr>
<td>ARTC 1391</td>
<td>3</td>
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<tr>
<td>ARTC 2378</td>
<td>3</td>
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<tr>
<td>ARTC 2479</td>
<td>3</td>
</tr>
<tr>
<td>SEMESTER V</td>
<td></td>
</tr>
<tr>
<td>XXXX XXXX</td>
<td>3</td>
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<tr>
<td>IMED 2311</td>
<td>3</td>
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<td>ARTC 1391</td>
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<td>ARTC 2378</td>
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<td>ARTC 2479</td>
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</table>

Minimum Hours Required ........................................ 63-68

SPECIALIZATION IN:

COMMUNICATION DESIGN

SEMESTER IV

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<td>IMED 2315</td>
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<td>ARTC 2347</td>
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SEMESTER V

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MULTIMEDIA COMMUNICATIONS

SEMESTER IV

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<td>PHTC 1349</td>
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SEMESTER V

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<thead>
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NOTE: For a specialization in Illustration, the following class is substituted for ARTC 2378 Design Studio Practices or ARTC 2379 Cooperative Education/ARTC 2479 Cooperative Education requirement in Semester V:

SEMESTER V

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<tr>
<td>ARTT 1151</td>
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</table>

**PREPRESS PRODUCTION

SEMESTER IV

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SEMESTER V

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<tr>
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<td>3</td>
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<tr>
<td>ARTC 2309</td>
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</table>

**NOTE: For a specialization in Prepress Production, ARTC 2378 Design Studio Practices and ARTC 2379 Cooperative Education or ARTC 2479 Cooperative Education are both required and are to be taken in the following semesters:

SEMESTER IV

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
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SEMESTER V

<table>
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<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
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<td>3</td>
</tr>
<tr>
<td>ARTC 2479</td>
<td>4</td>
</tr>
</tbody>
</table>

This is a Tech Prep program. Students interested in pursuing the Tech Prep Enhanced Skills certificate need to consult with their advisor.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
The Enhanced Skills Certificate is attached to the Associate in Applied Sciences Degree in Visual Communications and provide the student with advanced skills required by the industry.

**VISUAL COMMUNICATIONS**

*Brookhaven only*

*(Students pursuing this certificate program are required to meet all TASP requirements.)*

Degree Plan Code: ES.VISUAL.COMM

<table>
<thead>
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<tbody>
<tr>
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<tr>
<td>IMED 2315</td>
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<tr>
<td>ARTC 13453D</td>
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<tr>
<td>GRPH 2341</td>
</tr>
<tr>
<td>ARTC 2371</td>
</tr>
</tbody>
</table>

Minimum Hours Required ........................................ 9
VOCATIONAL NURSING

El Centro only

(Certificate)

(Students pursuing this certificate program are required to meet all TASP requirements.)

Degree Plan Code: CERT.NURS.VOCATIONAL

The Vocational Nursing program is a twelve-month program that prepares students to give direct patient care under the supervision of a registered nurse or a physician. The program is accredited by the Board of Vocational Nurse Examiners for the State of Texas (333 Guadalupe, Suite 3-400, Austin, Texas 78701: Telephone number 512-305-8100) and the National League for Nursing Accrediting Commission (350 Hudson St., New York, New York 10014: Telephone number 404-679-4501). Upon completion of the program, the student is awarded a certificate and may write the Licensing Examination for Vocational Nurses (NCLEX-PN) in order to become a Licensed Vocational Nurse (LVN) in Texas. The program includes classroom and laboratory work on campus as well as clinical experience at various area hospitals.

Admission requirements include an information session, satisfactory scores on pre-entrance assessment testing, and a cumulative grade point average of 2.0 or better on any college course work completed. There are no formal prerequisite courses; however, students are encouraged to complete the general education support courses required in the nursing curriculum prior to application to the program. Applicants are ranked utilizing the following priority criteria: 1) number of credit hours of general education support courses required by the Vocational Nursing curriculum, 2) grade point average on the required general education support courses, and 3) information session attendance date.

PREREQUISITES

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>BIOL 1470</td>
<td>Introduction to Human Anatomy and Physiology</td>
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<td>ENGL 1301</td>
<td>Composition I</td>
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<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
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<th>CREDIT HOURS</th>
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<tr>
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<tr>
<td>VNSG 1227</td>
<td>Essentials of Medication Administration</td>
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<tr>
<td>VNSG 1323</td>
<td>Basic Nursing Skills</td>
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<tr>
<td>VNSG 1509</td>
<td>Nursing in Health and Illness II</td>
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<tr>
<td>VNSG 1304</td>
<td>Foundations of Nursing</td>
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<td>VNSG 1360</td>
<td>Clinical-Practical Nurse (LPN Training)</td>
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<tr>
<td>HPRS 1204</td>
<td>Basic Health Profession Skills</td>
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<tr>
<td>VNSG 1510</td>
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<tr>
<td>VNSG 2460</td>
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<td>BIOL 1472</td>
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<td>HPRS 2300</td>
<td>Pharmacology for Health Professions</td>
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<th>SEMESTER III</th>
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<tr>
<td>VNSG 1406</td>
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<tr>
<td>VNSG 1163</td>
<td>Clinical-Practical Nurse (LPN Training)</td>
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<th>SEMESTER IV</th>
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<tr>
<td>VNSG 1334</td>
<td>Pediatrics</td>
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<tr>
<td>VNSG 1263</td>
<td>Clinical-Practical Nurse (LPN Training)</td>
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Minimum Hours Required: 54
The Welding Technology program is designed to prepare the student in the basic processes of oxyacetylene and arc welding plus many specialized welding applications as options to fit the specific needs of the student. In addition, instruction is offered in related support areas such as metallurgy, tooling, drafting, pattern layout and characteristics of materials. Thus the program offers preparation for both entry-level jobs as well as welding inspectors.

The student will be required to purchase a basic set of tools which will be used in class and later on the job. Tool lists will be given out by the instructor during the first week of classes.

**SEMESTER I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>WLDG 1425 Introduction to Oxyfuel Welding and Cutting</td>
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<tr>
<td>WLDG 1428 Introduction to Shielded Metal Arc Welding</td>
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<tr>
<td>DFTG 1224 Blueprint Reading and Sketching</td>
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<tr>
<td>MATH 1374[x] Technical Mathematics I</td>
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<td>ENGL 1301 Composition I</td>
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**SEMESTER II**

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<tr>
<td>WLDG 1337 Introduction to Metallurgy</td>
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</tr>
<tr>
<td>WLDG 1457 Intermediate Shielded Metal Arc Welding</td>
<td>4</td>
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<tr>
<td>WLDG 2411 Preparation for Welding Inspection Certification</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 2302 Applied Psychology</td>
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<td>SPCH 1311 Introduction to Speech Communication</td>
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**SEMESTER III**

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<tbody>
<tr>
<td>WLDG 1313 Introduction to Blueprint Reading</td>
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<tr>
<td>WLDG 1430 Introduction to Gas Metal Arc Welding</td>
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<td>WLDG 1434 Introduction to Gas Tungsten Arc Welding</td>
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<td>++Elective</td>
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<tr>
<td>PHYS 1470[x] Applied Physics</td>
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**SEMESTER IV**

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<tr>
<th>Course</th>
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<tr>
<td>WLDG 2331 Advanced Blueprint Interpretation and Cost Analysis</td>
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<tr>
<td>WLDG 2443 Advanced Shielded Metal Arc Welding</td>
<td>4</td>
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<tr>
<td>WLDG 2447 Advanced Gas Metal Arc Welding</td>
<td>4</td>
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<tr>
<td>WLDG 2451 Advanced Gas Tungsten Arc</td>
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<tr>
<td>++Elective</td>
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Minimum Hours Required: 67-70

++Electives—must be selected from the following:

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>WLDG 1191 Special Topics in Welder/Welding Technologist</td>
<td>1</td>
</tr>
<tr>
<td>WLDG 1225 Introduction to Oxy-Fuel Welding and Cutting</td>
<td>2</td>
</tr>
<tr>
<td>WLDG 1230 Introduction to Gas Metal Arc (MIG) Welding</td>
<td>2</td>
</tr>
<tr>
<td>WLDG 1234 Introduction to Gas Tungsten Arc (TIG) Welding</td>
<td>2</td>
</tr>
<tr>
<td>WLDG 1291 Special Topics in Welder/Welding Technologist</td>
<td>2</td>
</tr>
<tr>
<td>WLDG 1324 Mathematics for Business and Economics I</td>
<td>3</td>
</tr>
<tr>
<td>WLDG 1371 Welding Standards</td>
<td>3</td>
</tr>
<tr>
<td>WLDG 1381 Cooperative Education-Welder/Welding Technologist</td>
<td>3</td>
</tr>
<tr>
<td>WLDG 1471 Welding Qualifications</td>
<td>4</td>
</tr>
<tr>
<td>WLDG 2413 Welding using Multiple Processes</td>
<td>4</td>
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<tr>
<td>WLDG 2455 Advanced Welding Metallurgy</td>
<td>4</td>
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</tbody>
</table>

++Humanities/Fine Arts elective – Students may choose any Humanities/Fine Arts course to satisfy this elective requirement.

\[x]\ These courses have been or will be revised effective, Fall 2000.

NOTE: Students enrolling in this program who plan to transfer to a four-year institution should consult an advisor or counselor regarding transfer requirements and the transferability of these courses to the four-year institution of their choice.
ACCOUNTING

ACCT 2301 is a 3 credit hour lecture course. ACCT 2401 is a 4 credit hour lecture course. Either course will meet degree requirements.

ACCT 2301 Principles Of Accounting I (3)
(This is a common course number. Former course prefix/number ACC 201)
Suggested Prerequisite: None. This course covers the theory and practice of measuring and interpreting financial data for business units. Basic concepts, principles, and procedures are applied to the following topics: operating cycle, accruals and deferrals, financial statements, internal controls, receivables, inventory, fixed assets, and liabilities. (3 Lec.)

ACCT 2302 Principles Of Accounting II (3)
(This is a common course number. Former course prefix/number ACC 202)
Suggested Prerequisite: Accounting 2301 or Accounting 2401. This course is a continuation of Accounting 2301 or Accounting 2401. This course covers the theory and practice of measuring and interpreting financial data for business units, with emphasis on corporations and managerial applications. Basic concepts, principles, and procedures are applied to the following topics: preparation and analysis of financial statements, budgeting, cash flow, cost systems, responsibility accounting, and cost-volume-profit analysis. (3 Lec.)

ACCT 2401 is a 4 credit hour lecture and laboratory course. ACCT 2301 is a 3 credit hour lecture course. Either course will meet degree requirements.

ACCT 2401 Principles Of Accounting I (4)
(This is a common course number. Former course prefix/number ACC 209)
Suggested Prerequisite: None. This course covers the theory and practice of measuring and interpreting financial data for business units, with emphasis on corporations and managerial applications. Basic concepts, principles, and procedures are applied to the following topics: operating cycle, accruals and deferrals, financial statements, internal controls, receivables, inventory, fixed assets, and liabilities. Laboratory fee. (3 Lec., 2 Lab.)

ACCT 2402 is a 4 credit hour lecture and laboratory course. ACCT 2302 is a 3 credit hour lecture course. Either course will meet degree requirements.

ACCT 2402 Principles Of Accounting II (4)
(This is a common course number. Former course prefix/number ACC 209)
Suggested Prerequisite: Accounting 2301 or Accounting 2401. This course is a continuation of Accounting 2301 or Accounting 2401. This course covers the theory and practice of measuring and interpreting financial data for business units, with emphasis on corporations and managerial applications. Basic concepts, principles, and procedures are applied to the following topics: preparation and analysis of financial statements, budgeting, cash flow, cost systems, responsibility accounting, and cost-volume-profit analysis. Laboratory fee. (3 Lec., 2 Lab.)

ACNT 1303 Introduction To Accounting I (3)
(This is a WECM course number. Former course prefix/number ACCT 1371.)
Suggested Prerequisite: None. A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. (3 Lec.)

ACNT 1304 Introduction To Accounting II (3)
(This is a WECM course number. Former course prefix/number ACCT 1372.)
Suggested Prerequisite: Accounting 1303. A study of accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment, and valuation of inventories in a manual and computerized environment. (3 Lec.)

ACNT 1311 Introduction To Computerized Accounting (3)
(This is a WECM course number.)
Suggested Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment. Introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary emphasis on a general ledger package. Laboratory fee. (2 Lec., 2 Lab.)
ACNT 1313 Computerized Accounting Applications (3)  
(This is a WECM course number. Former course prefix/number ACCT 2370.)  
Suggested Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment. A study of utilizing the computer to develop and maintain accounting record keeping systems, make management decisions, and process common business applications with emphasis on utilizing a spreadsheet and/or data base package/program. Laboratory fee. (2 Lec., 2 Lab.)

ACNT 1329 Payroll And Business Tax Accounting (3)  
(This is a WECM course number.)  
Suggested Prerequisite: Accounting 2301 or Accounting 2401, Accounting 1303, or concurrent enrollment. A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. (3 Lec.)

ACNT 1331 Federal Income Tax: Individual (3)  
(This is a WECM course number. Former course prefix/number ACCT 2372.)  
Suggested Prerequisite: Accounting 2301 or Accounting 2401. Basic instruction in the tax laws as currently implemented by the Internal Revenue Service providing a working knowledge of preparing taxes for the individual. (3 Lec.)

ACNT 1366 Practicum - Accounting (3)  
(This is a WECM course number. Former course prefix/number ACCT 7371.)  
Suggested Prerequisite: Accounting 2301 or 2401, Accounting 1303, or concurrent enrollment and instructor approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

ACNT 1380 Cooperative Education - Accounting (3)  
(This is a WECM course number. Former course prefix/number ACCT 7372.)  
Suggested Prerequisite: Accounting 2301 or 2401, Accounting 1303, or concurrent enrollment and instructor approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

ACNT 1391 Special Topics In Accounting (3)  
(This is a WECM course number.)  
Suggested Prerequisite: None. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)

ACNT 2303 Intermediate Accounting I (3)  
(This is a WECM course number. Former course prefix/number ACCT 2378.)  
Suggested Prerequisite: Accounting 2301 or Accounting 2401. Critical analysis of generally accepted accounting principles, concepts, and theory underlying the preparation of financial statements. Emphasis on current theory and practice. (3 Lec.)

ACNT 2304 Intermediate Accounting II (3)  
(This is a WECM course number. Former course prefix/number ACCT 2379.)  
Suggested Prerequisite: Accounting 2303. Continued in-depth analysis of generally accepted accounting principles underlying the preparation of financial statements including comparative analysis and statement of cash flow. (3 Lec.)

ACNT 2309 Cost Accounting (3)  
(This is a WECM course number. Former course prefix/number ACCT 2376.)  
Suggested Prerequisite: Accounting 2302 or Accounting 2402. A study of budgeting and cost control systems including a detailed study of manufacturing cost accounts and reports, job order costing, and process costing. Includes introduction to alternative costing methods such as activity-based and just-in-time costing. (3 Lec.)
ACNT 2366  Practicum - Accounting (3)
(This is a WECM course number. Former course prefix/number ACCT 7471.)
Suggested Prerequisite: Accounting 1366 and instructor approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

ACNT 2380 Cooperative Education - Accounting (3)
(This is a WECM course number. Former course prefix/number ACCT 7472.)
Suggested Prerequisite: Accounting 1380 and instructor approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

AIR CONDITIONING AND REFRIGERATION

(See Heating, Ventilation and Air Conditioning)

ANTHROPOLOGY

ANTH 1370 American Indian Culture (3)
(Former course prefix/number ANT 104)
Native Americans are studied from three perspectives: Native American history and prehistory; traditional Indian cultures; and native Americans today. The latter theme stresses current topics such as discrimination, poverty, employment, reservations, The Bureau of Indian Affairs, self-determination, health care, etc. (3 Lec.)

ANTH 2302 Introduction To Archeology (3)
(Former course prefix/number ANT 231)
This course is an anthropological approach to archeology. Topics include an introduction to the study of humanity's past. How archeologist retrieve, process, analyze and interpret surviving prehistoric materials is covered, as well as a survey of world prehistory through Neolithic times. (3 Lec.)

ANTH 2346 Introduction To Anthropology (3)
(Former course prefix/number ANT 100)
This course surveys the origin of mankind involving the processes of physical and cultural evolution, ancient man, and preliterate man. Attention is centered on fossil evidence, physiology and family/group roles and status. (3 Lec.)

ANTH 2351 Cultural Anthropology (3)
(Former course prefix/number ANT 101)
This course introduces students to the elements and processes that create culture, society and social interaction. Language, cross-cultural communication, fieldwork, and analysis of multi-cultural societies are covered. A special emphasis is given to cross-cultural comparison and analysis of basic social institutions on a global scale in order to provide students with an appreciation and understanding of the underlying unity of diverse cultural expressions. (3 Lec.)

ANTH 2380 The Heritage Of Mexico (3)
(Former course prefix/number ANT 110)
This course (cross-listed as History 2380) is taught in two parts each semester. The first part of the course deals with the archeology of Mexico beginning with the first humans to enter the North American continent and culminating with the arrival of the Spanish in 1519 A.D. Emphasis is on archaic cultures, the Maya, the Toltec, and Aztec empires. The second part of the course deals with Mexican history and modern relations between the United States and Mexico. The student may register for either History 2380 or Anthropology 1371 but may receive credit for only one of the two. (3 Lec.)
ARCHITECTURE

ARCH 1205 Architectural Aesthetics (3)
(This is a common course number. Former course prefix/number ARC 102)
Visual experiences in the aesthetics of architecture are studied in context with architecture as a contemporary philosophical concept. (3 Lec.)
(Coordinating Board Academic Approval Number 0402015222)

ARCH 1301 History Of Architecture Survey To 1850 (3)
(This is a common course number. Former course prefix/number ARC 233)
The architectural contributions of Ancient, Classical, Medieval, and Renaissance societies are surveyed, along with their relationships to the cultural heritage of the Western World. (3 Lec.)
(Coordinating Board Academic Approval Number 3012015122)

ARCH 1302 History Of Modern Architecture (3)
(This is a common course number. Former course prefix/number ARC 230)
The evolution of 20th Century design theory is surveyed, from the Industrial Revolution to the present. Special attention is given to significant architects, designers, and personalities and their effect on the modern movement. (3 Lec.)
(Coordinating Board Academic Approval Number 3012015122)

ARCH 1303 Architectural Design I (3)
(This is a common course number. Former course prefix/number ARC 161)
Basic concepts of design are studied including form, scale, proportion, rhythm, unity, accent, texture, and pattern, as applied to two-dimensional and three-dimensional abstract projects. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0402015422)

ARCH 1304 Architectural Design II (3)
(This is a common course number. Former course prefix/number ARC 162)
Prerequisites: For architecture majors only, Architecture 1307 and Architecture 1303. This course is a continuation of Architecture 1303, with emphasis upon architecture theories, perceptions, environmental factors and communication of those elements in design. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0402015422)

ARCH 1307 Architectural Graphics I (3)
(This is a common course number. Former course prefix/number ARC 130)
Basic architectural drafting techniques are studied including orthographic projection and isometric drawing. Linework in pencil and ink are emphasized. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025322)

ARCH 1308 Architectural Graphics II (3)
(This is a common course number. Former course prefix/number ARC 133)
Prerequisite: Architecture 1307 or demonstrated competence approved by the division dean.
Three-dimensional drawing utilizing perspective and shade/shadow theory is studied in pencil and ink. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025322)

ARCH 1311 Introduction to Architecture (3)
(This is a common course number. Former course prefix/number ARC 101)
This course is an introduction to the elements of architecture; opportunities within the architectural profession are explored. (3 Lec.)
(Coordinating Board Academic Approval Number 0402015922)

ARCH 1315 Architectural Computer Graphics I (3)
(This is a common course number. Former course prefix/number ARC 257)
Basic computer terminology and software applications utilizing the microcomputer in architecture and design are studied. Laboratory fee. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4801025222)

ARCH 1403 Fundamental Design Studio I (4)
(This is a common course number. Former course prefix/number ART 165)
Prerequisites: Interior Design program major. Basic concepts of design limited to black and white values are studied including form, scale, space, proportion, rhythm, theme, variety, accent, unity, texture, and pattern as applied to two-dimensional and three-dimensional abstract projects. This course is intended for students enrolled in applied arts programs. Laboratory fee. (2 Lec., 5 Lab.)
(Coordinating Board Academic Approval Number 0402015422)

ARCH 2301 Freehand Drawing I (3)
(This is a common course number. Former course prefix/number ARC 163)
Representational drawing is studied with emphasis upon eye-to-hand coordination utilizing light, shade, line, and tonal quality. Pencil media is utilized. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025122)

ARCH 2302 Freehand Drawing II (3)
(This is a common course number. Former course prefix/number ARC 135)
Prerequisite: Architecture 2301. Representational drawing is continued using a variety of techniques in pen and ink media. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025122)
ARCH 2312 Materials Of Construction (3)
(This is a common course number. Former course prefix/number ARC 151)
The nature and use of materials in construction are explored. Emphasis is placed upon appropriateness and use in design as they relate to design expression and codes. (3 Lec.)
(Coordinating Board Academic Approval Number 1501015122)

ARCH 2370 Freehand Drawing III (3)
(Former course prefix/number ARC 237)
Prerequisite: Architecture 1308 or demonstrated competence approved by the instructor. This course includes an introduction to and the development of rapid graphic skills needed to formulate and communicate design concepts, including the study and practice of visualization and freehand perspective drawing of design elements. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801025122)

ARCH 2371 Architectural Computer Graphics (3)
(Former course prefix/number ARC 258)
Prerequisite: Architecture 1315 or demonstrated competence approved by the division dean. This course is a continuation of the study of computer aided design (CAD) in architecture. Emphasis will include detailed applications in design and drawing. Laboratory fee. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4801025222)

ART

ARTS 1170 Problems In Contemporary Art (1)
(Former course prefix/number ART 199)
Area artists, critics, and art educators speak with students about the work exhibited in the gallery and discuss current art styles and movements. They also discuss specific aspects of being artists in contemporary society. This course may be repeated for credit. (1 Lec.)
(Coordinating Board Academic Approval Number 5007035330)

ARTS 1301 Art Appreciation (3)
(This is a common course number. Former course prefix/number ART 104)
Films, lectures, slides, and discussions focus on the theoretical, cultural, and historical aspects of the visual arts. Emphasis is on the development of visual and aesthetic awareness. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035130)

ARTS 1303 Survey Of Art History (3)
(This is a common course number. Former course prefix/number ART 105)
This course covers the history of western art from prehistoric time through the Gothic period. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 1304 Survey Of Art History (3)
(This is a common course number. Former course prefix/number ART 106)
This course covers the history of art from the Renaissance through the present. It explores the cultural, geophysical, and personal influences on art styles. (3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 1311 2D Design (3)
(Former course prefix/number ART 110)
Basic concepts of design with two-dimensional materials are explored. The use of line, color, illusion of space or mass, texture, value, shape, and scale in composition is considered. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015330)

ARTS 1312 3D Design (3)
(Former course prefix/number ART 111)
Basic concepts of design with three-dimensional materials are explored. The use of mass, space, movement, and texture, line, plane, volume, color, and scale is considered. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015330)

ARTS 1316 Drawing I (3)
(Former course prefix/number ART 114)
This beginning course investigates various media, techniques, and subjects. It explores perceptual and descriptive possibilities and considers drawing as a developmental process as well as an end in itself. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055230)

ARTS 1317 Drawing II (3)
(Former course prefix/number ART 115)
Prerequisite: Arts 1316. This course is an expansion of Arts 1316. It stresses the expressive and conceptual aspects of drawing, including advanced composition arrangements, a range of wet and dry media, and the development of an individual approach to theme and content. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055230)
ARTS 2311 Design III (3)
(This is a common course number. Former course prefix/number ART 227)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. This course is a development of two- and three-dimensional projects in a variety of materials. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015330)

ARTS 2312 Design IV (3)
(Form former course prefix/number ART 229)
Prerequisite: Arts 2311. This course is a continued investigation into the problems of two- and three-dimensional concepts. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)

ARTS 2313 Computer Graphics Design I (3)
(This is a common course number. Former course prefix/number ART 223)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. Introduction to the computer as an art tool with emphasis on design principles and visual communication or ideas. Course will include exposure to basic computer graphic technology including computer illustration and electronic imaging techniques. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015130)

ARTS 2314 Computer Graphics Design II (3)
(This is a common course number. Former course prefix/number ART 224)
Prerequisites: Arts 2313. This course is a continuation of Computer Graphics Design I. Students will further explore advanced design problems through continued experimentation with computer graphics techniques. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004015130)

ARTS 2316 Painting I (3)
(This is a common course number. Former course prefix/number ART 205)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. This studio course stresses fundamental concepts of painting with acrylics and oils. Emphasis is on painting from still life, models, and the imagination. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085230)

ARTS 2317 Painting II (3)
(This is a common course number. Former course prefix/number ART 206)
Prerequisite: Arts 2316. This course continues Arts 2316. Emphasis is on individual expression. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085230)

ARTS 2323 Drawing III (3)
(This is a common course number. Former course prefix/number ART 201)
Prerequisites: Arts 1317, Arts 1311, Arts 1312 and Arts 1316 are recommended for Art Majors. This course covers the analytic and expressive drawing of the human figure. Movement and volume are stressed. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055330)

ARTS 2324 Drawing IV (3)
(This is a common course number. Former course prefix/number ART 202)
Prerequisites: Arts 2323, sophomore standing, or demonstrated competence approved by the instructor. This course continues Arts 2323. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007055330)

ARTS 2326 Sculpture I (3)
(This is a common course number. Former course prefix/number ART 208)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. Various sculptural approaches are explored. Different media and techniques are used. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007095130)

ARTS 2327 Sculpture II (3)
(This is a common course number. Former course prefix/number ART 209)
Prerequisite: Arts 2326. This course continues Arts 2326. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007095130)

ARTS 2333 Printmaking I (3)
(This is a common course number. Former course prefix/number ART 220)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. Basic printmaking processes are introduced. Included are planographic, intaglio, stencil and relief processes. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007105130)
ARTS 2334 Printmaking II (3)
(This is a common course number. Former course prefix/number ART 222)
Prerequisite: Arts 2333. This course is a continuation of Printmaking I. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007105130)

ARTS 2336 Fibers I (3)
(This is a common course number. Former course prefix/number ART 233)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. This course explores the problems of design, construction, and form utilizing basic fiber techniques. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007125130)

ARTS 2337 Fibers II (3)
(This is a common course number. Former course prefix/number ART 233)
Prerequisite: Arts 2336. This course is a continuation of Arts 2336. It further explores fiber techniques and processes. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007125130)

ARTS 2341 Jewelry Design And Construction (3)
(This is a common course number. Former course prefix/number ART 116)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. This course explores the uses of metal in design, basic fabrication techniques in metal, bezel setting of stones, and simple casting. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007135130)

ARTS 2342 Advanced Jewelry Design And Construction (3)
(This is a common course number. Former course prefix/number ART 117)
Prerequisite: Arts 2341. This course continues Arts 2341. Advanced fabrication, lost wax casting, setting of faceted stones, and forging and shaping of metal, including repoussé and chasing are presented. Emphasis is on original design. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007135130)

ARTS 2346 Ceramics I (3)
(This is a common course number. Former course prefix/number ART 215)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. This course focuses on the building of pottery forms by coil, slab, and use of the wheel. Glazing and firing are also included. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007115130)

ARTS 2347 Ceramics II (3)
(This is a common course number. Former course prefix/number ART 216)
Prerequisite: Arts 2346 or demonstrated competence approved by the instructor. Glaze technology is studied. Advanced problems in the creation of artistic and practical ceramic ware. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007115130)

ARTS 2356 Photography I (3)
(This is a common course number. Former course prefix/number ART 118)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. Creative use of the camera is studied. Photosensitive materials are examined as a means of making expressive graphic images. Emphasis is on black and white processing and printing techniques. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055130)

ARTS 2357 Photography II (3)
(This is a common course number. Former course prefix/number ART 119)
Prerequisite: Arts 2356. This course is a continuation of Arts 1370. Emphasis is on individual expression. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055230)

ARTS 2366 Watercolor I (3)
(This is a common course number. Former course prefix/number ART 217)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. This course explores studio techniques in water base media. Emphasis is placed on exploration of a variety of modes and techniques as a means to original expression. This course may be repeated for credit. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085330)
ARTS 2367 Watercolor II (3)
(This is a common course number. Former course prefix/number ART 218)
Prerequisite: Arts 2366. This course continues the development of skills in water base media.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5007085330)

ARTS 2370 Art History (3)
(Former course prefix/number ART 203)
Prerequisites: Arts 1303 and Arts 1304 are recommended for Art Majors. The development of the art of western culture during the Renaissance Period is presented. Emphasis is on the development of Renaissance art in Northern and Southern Europe.
(3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 2371 Art History (3)
(Former course prefix/number ART 204)
Prerequisites: Arts 1303 and Arts 1304 are recommended for Art Majors. The development of the art of western culture from the late 19th century through today is presented. Emphasis is on the development of modern art in Europe and America.
(3 Lec.)
(Coordinating Board Academic Approval Number 5007035230)

ARTS 2372 Commercial Arts I (3)
(Former course prefix/number ART 210)
Prerequisites: Arts 1311, Arts 1312, Arts 1316, and Arts 1317 are recommended for Art Majors. The working world of commercial art is introduced. Typical commercial assignments are used to develop professional attitudes and basic studio skills. Laboratory fee.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5004027126)

ASTRONOMY
(See Physics)

AUTO BODY

ABDR 1191 Special Topics In Auto/Automotive Body Repairer (1)
(This is a WECM course number. Former course prefix/number ABDY 2170.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee.
(3 Lab.)

ABDR 1431 Basic Refinishing (4)
(This is a WECM course number. Former course prefix/number ABDY 1571.)
An introduction to terms, trade practices, hand tools, power tools, current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Painting of trim and replacement parts included. Emphasis on surface preparation. Introduction to masking techniques. Laboratory fee.
(2 Lec., 6 Lab.)

ABDR 1519 Basic Metal Repair (5)
(This is a WECM course number. Former course prefix/number ABDY 1570.)
Basic current metal working techniques, shop safety, proper tool usage, product application, and skill development utilizing various body features including metal principles. Laboratory fee.
(3 Lec., 6 Lab.)

ABDR 1555 Minor Metal Repair (5)
(This is a WECM course number. Former course prefix/number ABDY 1572.)
Sheet metal alignment principles using mechanical and hydraulic equipment. Emphasis on attachment devices used to straighten and align exterior body panels. Laboratory fee.
(3 Lec., 6 Lab.)

ABDR 1558 Intermediate Refinishing (5)
(This is a WECM course number. Former course prefix/number ABDY 1573.)
Mixing and spraying of automotive topcoats. Emphasis on formula ingredient, reducing, thinning, and special spraying techniques. Introduction to partial panel refinishing techniques and current industry paint removal techniques. Laboratory fee.
(3 Lec., 6 Lab.)

ABDR 2353 Color Analysis and Paint Matching (3)
(This is a WECM course number. Former course prefix/number ABDY 2370.)
Color theory, color analysis, tinting, and advanced blending techniques for commercially acceptable paint matching. Laboratory fee.
(2 Lec., 2 Lab.)

ABDR 2355 Collision Repair Estimating (3)
(This is a WECM course number. Former course prefix/number ABDY 2372.)
An advanced course in collision estimating and development of an accurate damage report.
(3 Lec.)

ABDR 2357 Collision Repair Shop Management (3)
(This is a WECM course number. Former course prefix/number ABDY 2371.)
A study of methods and equipment used in state of the art repair shops to improve management functions and profitably.
(3 Lec.)
ABDR 2380 Cooperative Education - Auto/ Automotive Body Repairer (3)
(This is a WECM course number. Former course prefix/number ABDY 7371.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated and learning outcomes vary. (1 Lec., 15 Lab.)

ABDR 2402 Auto Body Mechanical and Electrical Service (4)
(This is a WECM course number.)
Instruction in the repair, replacement, and/or service of those mechanical or electrical systems that are subject to damage from a collision. Topics include drive train removal, reinstallation and service; cooling system service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading wiring diagrams, and troubleshooting. (4 Lec.)

ABDR 2537 Structural Analysis and Damage Repair V (5)
(This is a WECM course number. Former course prefix/number ABDY 2571.)
Skill development in the operation of equipment and the procedures involved in making satisfactory repairs of supporting structures on both conventional and unitized constructed vehicles. Special emphasis on conducting a thorough damage analysis as well as demonstrating proper holding, blocking, and pulling. Laboratory fee. (3 Lec., 6 Lab.)

ABDR 2541 Major Collision Repair and Panel Replacement (5)
(This is a WECM course number. Former course prefix/number ABDY 2570.)
Instruction in preparation of vehicles for repair including removal and reinstallation of fenders, bumpers, trims, head and door liners, locks, handles, fascia, headers, doors, tailgates, deck lids, hatches, and hoods. Interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for reinstallation are also included. Special emphasis on developing safe work habits. Laboratory fee. (3 Lec., 6 Lab.)

AUTOMOTIVE TECHNOLOGY

AUMT 1280 Cooperative Education-Auto/ Automotive Mechanic/Technician (2)
(This is a WECM course number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

AUMT 1281 Cooperative Education-Auto/ Automotive Mechanic/Technician (2)
(This is a WECM course number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

AUMT 1305 Introduction To Automotive Technology (3)
(This is a WECM course number. Former course prefix/number AUTO 1163 or AUTO 1370.)
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1306 Automotive Engine Removal And Installation (3)
(This is a WECM course number. Former course prefix/number AUTO 1164.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. Fundamentals of engine inspection, removal and installation procedures. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)
AUMT 1307 Automotive Electrical Systems (3)
(This is a WECM course number. Former course prefix/number AUTO 1173 or AUTO 1371.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1310 Automotive Brake Systems (3)
(This is a WECM course number. Former course prefix/number AUTO 1166 or AUTO 2470.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1316 Suspension And Steering (3)
(This is a WECM course number. Former course prefix/number AUTO 1167.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. Theory and operation of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1319 Automotive Engine Repair (3)
(This is a WECM course number. Former course prefix/number AUTO 1165.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. Fundamentals of engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1345 Automotive Heating And Air Conditioning (3)
(This is a WECM course number. Former course prefix/number AUTO 2244 or AUTO 2370.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1380 Cooperative Education-Auto/ Automotive Mechanic/Technician (3)
(This is a WECM course number. Former course prefix/number AUTO 1743 or AUTO 7371.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

AUMT 1381 Cooperative Education-Auto/ Automotive Mechanic/Technician (3)
(This is a WECM course number. Former course prefix/number AUTO 1753 or AUTO 7372.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

AUMT 2280 Cooperative Education-Auto/ Automotive Mechanic/Technician (2)
(This is a WECM course number.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tr>
<td>AUMT 2281</td>
<td>Cooperative Education-Auto/Automotive Mechanic/Technician (2)</td>
<td>Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)</td>
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<td>AUMT 2313</td>
<td>Manual Drive Train And Axles (3)</td>
<td>Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. A study of automotive clutches, clutch operation devices, standard transmissions, transaxles, and differentials with emphasis on the diagnosis and repair of transmissions and drive lines. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2317</td>
<td>Engine Performance Analysis I (3)</td>
<td>Prerequisite: AUMT 1307. Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic engine performance diagnostic equipment. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2325</td>
<td>Automatic Transmission And Transaxle (3)</td>
<td>Prerequisite: AUMT 1307. A study of the operation, hydraulic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2334</td>
<td>Engine Performance Analysis II (3)</td>
<td>Prerequisite: AUMT 2317. Diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2340</td>
<td>Automotive Alternative Fuels (3)</td>
<td>Prerequisite: AUMT 1307. A study of the composition and use of various alternative automobile fuels including retrofit procedures and applications, emission standards, availability, and course effectiveness. Overview of federal and state legislation concerning fuels. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2373</td>
<td>Automotive Electronics (3)</td>
<td>Prerequisite: AUMT 1307. Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2374</td>
<td>Automatic Transmission And Transaxle II (3)</td>
<td>Prerequisite: AUMT 2325. A study of the operation, electronic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, service, and repair procedures with emphasis on the use of special tools and proper repair techniques. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2375</td>
<td>Powertrain Diagnostics (3)</td>
<td>Prerequisite: AUMT 2334 or AUMT 2374. Diagnosis and repair of powertrain systems including engine and/or transmission systems; with emphasis on the application of advanced diagnostic information, tools and techniques. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)</td>
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<tr>
<td>AUMT 2376</td>
<td>Basic Hydraulics (3)</td>
<td>Prerequisite: AUMT 1305. This course is designed to provide students with information relating to hydraulic system components including hydraulic pumps, cylinders, control valves, motors, and related systems. Laboratory fee (2 Lec., 4 Lab.)</td>
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AUMT 2377 Electric Vehicle Motors And Controls (3) 
(This is a local need course number. Former course prefix/number AUTO 2573.)
Prerequisite: AUMT 1307. This course is designed to provide students with information relating to electric motor powered vehicles including D. C. motor design and operation, electric motor controllers, and diagnosis and repair of related components. Laboratory fee. 
(2 Lec., 4 Lab.)

AUMT 2380 Cooperative Education-Auto/Automotive Mechanic/Technician (3) 
(This is a WECM course number. Former course prefix/number AUTO 2843, AUTO 7371 or AUTO 7471.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

AUMT 2381 Cooperative Education-Auto/Automotive Mechanic/Technician (3) 
(This is a WECM course number. Former course prefix/number AUTO 2853 or AUTO 7472.)
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

AUMT 2437 Automotive Electronics (4) 
(This is a WECM course number.)
Prerequisite: AUMT 1307. Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. May be taught manufacturer specific. Laboratory fee. 
(2 Lec., 4 Lab.)

AUTOMOTIVE TECHNOLOGY/DIESEL AND HEAVY EQUIPMENT

AUMT 1305 Introduction To Automotive Technology (3) 
(This is a WECM course number. Former course prefix/number AUTO 1163 or AUTO 1370.)
An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1307 Automotive Electrical Systems (3) 
(This is a WECM course number. Former course prefix/number AUTO 1173 or AUTO 1371.)
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1310 Automotive Brake Systems (3) 
(This is a WECM course number. Former course prefix/number AUTO 1166 or AUTO 2470.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 1345 Automotive Heating And Air Conditioning (3) 
(This is a WECM course number. Former course prefix/number AUTO 2244 or AUTO 2370.)
Prerequisite: AUMT 1307 or concurrent enrollment in AUMT 1307. Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)
AUMT 2313 Manual Drive Train And Axles (3)  
(This is a WECM course number. Former course prefix/number AUTO 1168 or AUTO 2371.)  
Prerequisite: AUMT 1305 or concurrent enrollment in AUMT 1305. A study of automotive clutches, clutch operation devices, standard transmissions, transaxles, and differentials with emphasis on the diagnosis and repair of transmissions and drive lines. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 2373 Automotive Electronics (3)  
(This is a local need course number. Former course prefix/number AUTO 2240 or AUTO 2379.)  
Prerequisite: AUMT 1307. Topics address electrical principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment as applied to automotive technology. May be taught manufacturer specific. Laboratory fee. (2 Lec., 4 Lab.)

AUMT 2380 Cooperative Education-Auto/  
Automotive Mechanic/Technician (3)  
(This is a WECM course number. Former course prefix/number AUTO 2843, AUTO 7371 or AUTO 7471.)  
Prerequisite: Completion of at least 2 AUMT courses and Automotive Department approval. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

DEMR 1229 Preventative Maintenance (2)  
(This is a WECM course number. Former course prefix/number AUTO 1270.)  
An introductory course designed to provide the student with basic knowledge of proper serving practices. Content includes record keeping and condition of major systems. Laboratory fee. (1 Lec., 3 Lab.)

DEMR 1327 Tractor Trailer Service and Repair (3)  
(This is a WECM course number. Former course prefix/number AUTO 2573.)  
An introduction to and familiarization with components and systems related to tractor trailer service. Emphasis on records required by the Department of Transportation. Laboratory fee. (1 Lec., 6 Lab.)

DEMR 1410 Diesel Engine Testing and Repair I (4)  
(This is a WECM course number. Former course prefix/number AUTO 1372.)  
An introduction to testing and repairing diesel engines including related systems specialized tools. Laboratory fee. (2 Lec., 6 Lab.)

DEMR 1411 Diesel Engine Testing and Repair II (4)  
(This is a WECM course number. Former course prefix/number AUTO 1474.)  
Coverage of testing and repairing diesel engines including related systems specialized tools. Laboratory fee. (2 Lec., 6 Lab.)

DEMR 1416 Basic Hydraulics (4)  
(This is a WECM course number. Former course prefix/number AUTO 2474.)  
Fundamentals of hydraulics including components and related systems. Laboratory fee. (2 Lec., 6 Lab.)

DEMR 1447 Power Train II (4)  
(This is a WECM course number. Former course prefix/number AUTO 2572.)  
Extended applications of mechanics and theory of power trains. Emphasis on disassembly, inspection, and repair of power train components. Laboratory fee. (2 Lec., 6 Lab.)

DEMR 2331 Advanced Brake Systems (3)  
(This is a WECM course number. Former course prefix/number AUTO 2248.)  
An advanced brake system course designed for diesel powered equipment. Advanced concepts and schematics including anti-lock, air, pneumatic, and hydraulic brake systems and related components. Laboratory fee. (2 Lec., 4 Lab.)

DEMR 2334 Advanced Diesel Tune-Up and  
Troubleshooting (3)  
(This is a WECM course number. Former course prefix/number AUTO 2251.)  
Concepts and skills required for tune-up and troubleshooting procedures of diesel engines. Emphasis on the science of diagnostics with a common sense approach. Laboratory fee. (1 Lec., 6 Lab.)

DEMR 2335 Advanced Hydraulics (3)  
(This is a WECM course number. Former course prefix/number AUTO 2250.)  
Advanced study of hydraulic systems and components including diagnostics and testing of hydraulic systems. Laboratory fee. (1 Lec., 6 Lab.)

DEMR 2348 Failure Analysis (3)  
(This is a WECM course number. Former course prefix/number AUTO 2376.)  
An advanced course designed for analysis of typical part failures on equipment. Laboratory fee. (1 Lec., 6 Lab.)

DEMR 2432 Electronic Controls (4)  
(This is a WECM course number. Former course prefix/number AUTO 2249.)  
Advanced skills in diagnostic and programming techniques of electronic control systems. Laboratory fee. (2 Lec., 6 Lab.)
DEMR 2542 Automatic Power Shift and Hydrostatic Transmissions I (5)
(This is a WECM course number. Former course prefix/number AUTO 2571.)
A study of the operation, maintenance, and repair of automatic shift hydrostatic transmissions. Laboratory fee. (3 Lec., 6 Lab.)

HEMR 1501 Tracks and Undercarriages (5)
(This is a WECM course number. Former course prefix/number AUTO 2570.)
Concepts in operation and maintenance of final drive truck systems and undercarriages used on truck and wheel type equipment. Laboratory fee. (3 Lec., 6 Lab.)

AVIATION

AIRP 1215 Private Flight (2)
(This is a WECM course number. Former course prefix/number AVIA 1170 and AVIA 1171)
Flight training to prepare the student for the completion of the Federal Aviation Administration private pilot certification process, including dual and solo flight in the areas of maneuvers and cross-country navigation. (1 Lec., 2 Lab.)

AIRP 1255 Intermediate Flight (2)
(This is a WECM course number. Former course prefix/number AVIA 2272)
Provides students with flight hours and skills necessary to fulfill solo cross-country hours required for the Federal Aviation Administration Commercial Pilot, single engine land, airplane rating. (1 Lec., 2 Lab.)

AIRP 1301 Air Navigation (3)
(This is a WECM course number.)
Instruction in Visual Flight Navigation in the National Airspace System. Topics include sectional charts, flight computers, plotters, and navigation logs. Qualifies as part of a program leading to Federal Aviation Administration certification. (3 Lec.)

AIRP 1307 Aviation Meteorology (3)
(This is a WECM course number. Former course prefix/number AVIA 2377.)
In-depth coverage of meteorological phenomena affecting aircraft flight. Topics include basic concepts of aviation meteorology in the study of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing, and fog. Also includes analysis and use of weather data for flight planning. (3 Lec.)

AIRP 1311 Flight Theory (3)
(This is a WECM course number. Former course prefix/number AVIA 1373.)
Instruction in basic flight information needed for flight in the National Aerospace System. Topics include publications, regulations, aircraft systems, and performance. Qualifies as part of a program leading to Federal Aviation Administration certification. (3 Lec.)

AIRP 1313 Introduction to Aviation (3)
(This is a WECM course number. Former course prefix/number AVIA 1370.)
A study of the historical development of the aviation industry, including key events in civil, military, and space exploration and an overview of legislation relating to aviation. (3 Lec.)

AIRP 1317 Private Pilot Ground School (3)
(This is a WECM course number. Former course prefix/number AVIA 1371.)
Basic ground school for the Private Pilot Certificate, providing the student with the necessary aeronautical knowledge that can be used for private pilot certification. Topics include principles of flight, radio procedures, weather, navigation, aerodynamics, and Federal Aviation Administration regulations. (3 Lec.)

AIRP 1343 Aerodynamics (3)
(This is a WECM course number. Former course prefix/number AVIA 2372.)
Study of the general principles of the physical laws of flight. Topics include physical terms and the four forces of flight, lift, weight, thrust, and drag; aircraft design; stability control; and high-speed flight characteristics. (3 Lec.)

AIRP 1347 Human Factors in Aviation (3)
(This is a WECM course number.)
Instruction in flight physiology, the decision-making process, pilot health maintenance, psychological aspects of flight, human behavior as related to the aircraft cockpit, and aeromedical information of significance to flight crews. (3 Lec.)

AIRP 1351 Instrument Ground School (3)
(This is a WECM course number. Former course prefix/number AVIA 2375.)
A study of basic instrument radio and navigation fundamentals used in instrument flight. Topics include a description and practical use of aerial navigation systems and instruments, charts used for instrument flight, and Federal Aviation Administration regulations. Qualifies as part of a program leading to Federal Aviation Administration certification. (3 Lec.)
AIRP 2236 Certified Flight Instructor-Airplane (2)
(This is a WECM course number. Former course prefix/number AVIA 2271.)
Flight instruction necessary to qualify for the Federal Aviation Administration Certified Flight Instructor - Airplane Certificate. Topics include ground and flight instruction. (1 Lec., 2 Lab.)

AIRP 2239 Commercial Flight (2)
(This is a WECM course number. Former course prefix/number AVIA 2275.)
Flight instruction necessary to qualify for the Federal Aviation Administration Commercial Pilot Certificate. Instruction includes both dual and solo flight training to prepare the student for mastery of all commercial pilot maneuvers. (1 Lec., 2 Lab.)

AIRP 2242 Flight Instructor - Instrument Airplane (2)
(This is a WECM course number. Former course prefix/number AVIA 2170.)
Skill development for flight instructors necessary to qualify for the Federal Aviation Administration Certified Flight Instructor Instrument Rating, airplane single-engine land. (1 Lec., 2 Lab.)

AIRP 2250 Instrument Flight (2)
(This is a WECM course number. Former course prefix/number AVIA 2274.)
Preparation for completion of the Federal Aviation Administration Instrument Pilot Rating with mastery of all instrument procedures. (1 Lec., 2 Lab.)

AIRP 2251 Multiengine Flight (2)
(This is a WECM course number. Former course prefix/number AVIA 2171.)
Preparation for the multiengine class rating which will be added to a current pilot certificate. Includes explanation and demonstration of all required Federal Aviation Administration normal and emergency operations and procedures. (1 Lec., 2 Lab.)

AIRP 2333 Aircraft Systems (3)
(This is a WECM course number.)
Study of the general principles, operation, and application of pneumatic, hydraulic, electrical, fuel, environmental, protection, and warning systems. Emphasis on types of aircraft structures and their control systems. (3 Lec.)

AIRP 2337 Commercial Ground School (3)
(This is a WECM course number. Former course prefix/number AVIA 2370.)
A study of advanced aviation topics that can be used for Federal Aviation Administration certification at the commercial pilot level. Includes preparation for the Commercial Airplane knowledge test. (3 Lec.)

AIRP 2349 Instructor Ground School (3)
(This is a WECM course number. Former course prefix/number AVIA 2379.)
Skill development in the fundamentals of teaching and learning in an aviation-oriented environment. Introduction to the techniques of instruction and analysis of flight maneuvers. Topics include flight instructor responsibilities and federal aviation regulations relating to the instructor rating. (3 Lec.)

AIRP 2352 Practical Dispatching I (3)
(This is a WECM course number. Former course prefix/number AVIA 2381.)
Study of advanced concepts in weight and balance, performance calculations, avionics, and engine and airplane specifications including Federal Aviation regulations. Preparation for the Federal Aviation Administration knowledge examination. (3 Lec.)

AIRP 2353 Practical Dispatching II (3)
(This is a WECM course number. Former course prefix/number AVIA 2382.)
A study of the duties and responsibilities required of an aircraft dispatcher. Topics include instruction in Federal Aviation Administration regulations, flight planning, and company operations for both domestic and international operations. Preparation for the Federal Aviation Administration Practical Examination. (3 Lec.)

AIRP 2355 Propulsion Systems (3)
(This is a WECM course number. Former course prefix/number AVIA 1374.)
In-depth coverage of aircraft engine theory and principles of operation of various types of aircraft engines including reciprocating, turboprop, turbojet, and turbofan. Topics include propellers, superchargers, engine accessories, controls, and instrumentation. (3 Lec.)

AVIM 2331 Airline Management (3)
(This is a WECM course number. Former course prefix/number AVIA 2374.)
An examination of the organization, operation, and management of airlines. Topics include financing, aircraft selection, route feasibility studies, load factors, and marketing. (3 Lec.)

AVIM 2335 Airport Management (3)
(This is a WECM course number. Former course prefix/number AVIA 2371.)
A study of the major functions of airport management including facilities and services, organization, human resources, maintenance, planning and zoning, operations, revenues and expenses, public relations, ecology, and safety. (3 Lec.)
AVIM 2337 Aviation Law (3)
(This is a WECM course number. Former course prefix/number AVIA 1372.)
A study of the historical development of aviation law including in-depth coverage of constitutional, criminal, civil, common, and international law as it relates to aviation activities. (3 Lec.)

AVIM 2339 Aviation Marketing (3)
(This is a WECM course number. Former course prefix/number AVIA 2376.)
A study of the significance and functions of airline marketing including market research, sales, advertising and promotion, traffic demand analysis, and price determination theory. (3 Lec.)

AVIM 2380 Cooperative Education - Aviation Management (3)
(This is a WECM course number. Former course prefix/number AVIA 8481.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

AVIONICS ELECTRONICS

AVNC 1303 Introduction To Aircraft Electronic Systems (3)
(This is a WECM course number. Former course prefix/number AVET 1370.)
This course is a study of the relationship between aircraft electronic systems and aircraft flight and navigation. Emphasis on the operation and function of the electronic systems and the operation of the systems and ramp. The student will describe the function and operation of aircraft electronic systems and operate aircraft electronic systems. Laboratory fee. (2 Lec., 2 Lab.)

AVNC 1443 Aircraft Electrical And Electronic Systems Installation (4)
(This is a WECM course number. Former course prefix/number AVET 1470.)
Suggested prerequisite: AVNC 1303. This course is a study of and practical experience in the installation of avionic systems in aircraft, mounting electronic equipment, construction and installation of electrical wiring and cables, proper use of tools, and selection of materials. The student will describe and lay out avionic systems and install avionic systems. Laboratory fee. (3 Lec., 3 Lab.)

AVNC 1453 Operational Testing Of Aircraft Electronic Systems (4)
(This is a WECM course number. Former course prefix/number AVET 1471.)
Suggested prerequisite: AVNC 1303. Topics in this course include integration of technical drawing interpretation, wiring interface checkout, and the application of ramp test equipment in common usage. Emphasis on performance of functional checks of aircraft electrical and electronic systems. The student will identify, describe, and use proper procedures and techniques for testing aircraft electronic systems. Laboratory fee. (3 Lec., 3 Lab.)

BIOLOGY

BIOL 1406 General Biology (4)
(This is a common course number. Former course prefix/number BIO 101)
This course is the first of a two semester sequence designed for students majoring or minoring in biology and related disciplines. Topics include but are not limited to the scientific method, general and biological chemistry, cell structure and function, cell reproduction, and molecular genetics. Laboratory fee. (3 Lec., 3 Lab.) (Coordinating Board Academic Approval Number 2601015124)

BIOL 1407 General Biology (4)
(This is a common course number. Former course prefix/number BIO 102)
Prerequisite: Biology 1406 General Biology. This course is a continuation of Biology 1406 and is intended for students majoring or minoring in biology and related disciplines. Topics include but are not limited to development, evolution, ecology, population genetics, and a review of the diversity of life. Laboratory fee. (3 Lec., 3 Lab.) (Coordinating Board Academic Approval Number 2601015124)
BIOL 1408 Biological Science (4)
(This is a common course number. Former course prefix/number BIO 115)
This course is designed for all majors except science. Selected topics in biological science are presented to students not majoring in the sciences to promote their understanding of biological concepts and to enable them to use these concepts in their daily lives. Topics include chemistry and biochemistry, the cell, respiration, photosynthesis, cell reproduction, genetics, and reproduction and development. Laboratory fee. (3 lec., 3 lab.)
(Coordinating Board Academic Approval Number 2601015124)

BIOL 1409 Biological Science (4)
(This is a common course number. Former course prefix/number BIO 116)
This course is designed for all majors except science. Selected topics in biological science are presented to students not majoring in the sciences to promote their understanding of biological concepts and to enable them to use these concepts in their daily lives. Topics include plant and animal systems, diversity of life and population dynamics, taxonomy, evolution, and ecology. Laboratory fee. (3 lec., 3 lab.)
(Coordinating Board Academic Approval Number 2601015124)

BIOL 1411 Introductory Botany (4)
(This is a common course number. Former course prefix/number BIO 110)
This course introduces plant form and function. Topics ranging from the cell through organs are included. Emphasis is on the vascular plants, including the taxonomy and life cycles of major plant divisions. Laboratory fee. (3 lec., 3 lab.)
(Coordinating Board Academic Approval Number 2603015124)

BIOL 1424 Intermediate Botany (4)
(Former course prefix/number BIO 203/BIOL 2470)
Prerequisites: Biology 1406 and 1407. The major plant groups are surveyed. Emphasis is on morphology, physiology, classification, and life cycles. Evolutionary relationships of plants to each other and their economic importance to humans are also covered. (3 lec., 3 lab.)
(Coordinating Board Academic Approval Number 2063015224)

BIOL 1470 Introduction To Human Anatomy And Physiology (4)
(Former course prefix/number BIO 120)
Prerequisite: Prior enrollment in Biology 1408 is recommended for those with no previous high school biology. Major topics include cell structure and function, tissues, organization of the human body, and the following organ systems: skeletal, muscular, nervous. This course is a foundation course for specialization in Associate Degree Nursing and allied health disciplines. Other students interested in the study of structure and function of the human body should consult a counselor. Emphasis is on homeostasis. Laboratory fee. (3 lec., 3 lab.)
(Coordinating Board Academic Approval Number 2607065124)

BIOL 1472 Introduction To Human Anatomy And Physiology (4)
(Former course prefix/number BIO 121)
Prerequisite: Biology 1470. This course is a continuation of Biology 1470. Major topics include the following organ systems: endocrine, digestive, circulatory, respiratory, urinary, and reproductive. Emphasis is on homeostasis. Laboratory fee. (3 lec., 3 lab.)
(Coordinating Board Academic Approval Number 2607065124)

BIOL 1473 Applied Anatomy And Physiology (4)
(Former course prefix/number BIO 123)
This course surveys human anatomy and physiology. The various body systems are studied and examined. This course is suggested for students of the health occupations in accordance with their program requirements. It is open to other students. This course will apply toward meeting the science requirement for non-science majors. No previous science background is presumed. Laboratory fee. (3 lec., 2 lab.)

BIOL 2306 Environmental Biology (3)
(Former course prefix/number BIO 223)
The principles of aquatic and terrestrial communities are presented. Emphasis is on the relationship of these principles to the problems facing people in a modern technological society. Laboratory fee. (3 lec., 3 lab.)
(Coordinating Board Academic Approval Number 0301025124)
BIOl 2370 Field Biology (3)
(Former course prefix/number BIO 218)
Local plant and animal life are surveyed in relationship to the environment. Aquatic and terrestrial communities are studied with reference to basic ecological principles and techniques. Emphasis is upon classification, identification, and collection of specimens in the field. This course may be repeated for credit. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2606039203. This is a unique need course.)

BIOl 2401 Anatomy And Physiology I (4)
(This is a common course number. Former course prefix/number BIO 221)
Prerequisite: Biology 1407 or demonstrated competence approved by the instructor. This course examines cell structure and function, tissues, and the skeletal, muscular, and nervous systems. Emphasis is on structure, function, and the interrelationships of the human systems. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607065124)

BIOl 2402 Anatomy And Physiology II (4)
(This is a common course number. Former course prefix/number BIO 222)
Prerequisite: Biology 2401 or demonstrated competence approved by the instructor. This is the second course of a two course sequence. Structure and function as related to the human circulatory, respiratory, urinary, digestive, reproductive, and endocrine systems are studied. Emphasis is placed on the interrelationships of these systems. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607065124)

BIOl 2416 Genetics (4)
(This is a common course number. Former course prefix/number BIO 226)
This course focuses on genetics. Topics include Mendelian inheritance, recombinant genetics, the biochemical theory of genetic material, and mutation theory. Plant and animal materials are used to study population genetics, linkage, gene structure and function, and other concepts of heredity. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2606135124)

BIOl 2418 Invertebrate Zoology (4)
(This is a common course number. Former course prefix/number BIO 211)
Prerequisite: Eight hours of biological science. This course surveys the major groups of animals below the level of chordates. Consideration is given to phylogeny, taxonomy, morphology, physiology, and biology of the various groups. Relationships and importance to higher animals and humans are stressed. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 2607019303. This is a unique need course.)

BIOl 2420 General Microbiology (4)
(This is a common course number. Former course prefix/number BIO 216)
Prerequisite: Biology 1407 or Biology 1472 or demonstrated competence approved by the instructor. Topics include growth, reproduction, nutrition, genetics, and ecology of micro-organisms, as well as aspects of microbial disease, immunology and chemotherapy. Laboratory activities constitute a major part of the course. Laboratory fee. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2605015124)

BIOl 2428 Comparative Anatomy Of The Vertebrates (4)
(This is a common course number. Former course prefix/number BIO 235)
Prerequisites: Biology 1406 and Biology 1407. For science majors and pre-medical and pre-dental students. Major groups of vertebrates are studied. Emphasis is on morphology and evolutionary relationships. Laboratory fee. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2607065124)

BUILDING PROPERTY MANAGEMENT

CBFM 1311 Building Maintenance I (3)
(This is a WECM course number. Former course prefix/number BPMT 1370.)
Introduction to the basic principles of residential and commercial maintenance and repair. Emphasis on safety, materials, and tool identification. (3 Lec.)
CBFM 2311 Building Maintenance II (3)
(This is a WECM course number. Former course prefix/number
BPMT 2370.)
This course is a continuation of CBFM 1311 which includes principles of residential and commercial maintenance and repair. Emphasis on safety, materials, and tool identification. (3 Lec.)

HART 1291 Special Topics in Heating, Air Conditioning, and Refrigeration Technologies/Technicians (2)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 2 Lab.)

HART 1292 Special Topics in Energy Management and Systems Technology/Technician (2)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 2 Lab.)

INSR 1345 Commercial Liability Risk Management and Insurance (3)
(This is a WECM course number.)
Analysis of the major sources of liability loss exposures and examination of the insurance coverage designed to meet those exposures. Topics include premises and operations, products and completed operations, contractual and protective liability, employer liability, and surety bonds. Exploration of tort and agency law as they relate to loss exposures involving third party claimants. (3 Lec.)

RELE 1329 Fundamentals Of Environmental Issues (3)
(This is a WECM course number. Former course prefix/number
BPMT 2375.)
A study of environmental issues affecting the real estate industry including hazardous substances, underground storage tanks, and wetlands. (3 Lec.)

RELE 1381 Cooperative Education - Real Estate (3)
(This is a WECM course number. Former course prefix/number REAL 7471.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning objectives vary. (1 Lec., 20 Ext.)

SEST 1341 Boilers-Operations; Installation and Maintenance (3)
(This is a WECM course number.)
Safe installation, operation, and maintenance procedures for boilers including total boiler analysis for maximum performance and efficiency of each system. Laboratory fee. (3 Lec., 1 Lab.)

BUSINESS

BUSI 1301 Introduction To Business (3)
(This is a common course number. Former course prefix/number BUS 105)
This course provides an introduction to business operations. Topics include: the business system, legal forms of business, organization and management, business functions (production, marketing, finance, risk management, information systems, accounting) and the environments affecting business (the economy, labor, government regulation, social responsibility, law, international business, and technology). (3 Lec.)
(Coordinating Board Academic Approval Number 5201015125)

BUSI 1307 Personal Finance (3)
(This is a common course number. Former course prefix/number BUS 143)
Personal financial issues are explored. Topics include financial planning, insurance, budgeting, credit use, home ownership, savings, investment, and tax problems. (3 Lec.)
(Coordinating Board Academic Approval Number 1904015125)

BUSI 2301 Business Law (3)
(This is a common course number. Former course prefix/number BUS 234)
This course presents the legal principles affecting business decisions. The law of contracts, agency, sales, negotiable instruments, and secured transactions are specifically covered. (3 Lec.)
(Coordinating Board Academic Approval Number 2201015125)
CHEMISTRY

CHEM 1204 Chemical Calculations (2)
(This Is a common course number. Former course prefix/number CHM 205)
Prerequisite: Chemistry 1412. Chemical calculations are reviewed. Emphasis is on stoichiometry and chemical equilibrium. (2 Lec.)
(Coordinating Board Academic Approval Number 4005025239)

CHEM 1405 Introductory Chemistry I (4)
(Former course prefix/number CHM 115)
Prerequisite: Developmental Mathematics 0091 or the equivalent. This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals, nonmetals and compounds, acid-base theory, oxidation-reduction, solutions and nuclear chemistry. Descriptive chemistry is emphasized. Laboratory fee. (3 Lee, 3 Lab.)
(Coordinating Board Academic Approval Number 4005015139)

CHEM 1407 Introductory Chemistry II (4)
(Former course prefix/number CHM 116)
Prerequisite: Chemistry 1405 or demonstrated competence approved by the instructor. This course is for non-science majors. It surveys organic chemistry and biochemistry. The reactions, syntheses, nomenclature, uses, purposes and properties of the important classes of organic and biochemical compounds are studied. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4005015139)

CHEM 1411 General Chemistry I (4)
(This Is a common course number. Former course prefix/number CHM 101)
Prerequisites: Developmental Mathematics 0093 or equivalent and any one of the following: high school chemistry, Chemistry 1405, or the equivalent. This course is for science and science-related majors. Fundamental concepts of chemistry are presented including states and properties of matter, the periodic table, chemical reaction types and energy relationships, chemical bonding, atomic and molecular structure, stoichiometry, gas laws and solutions. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4005015239)

CHEM 1412 General Chemistry II (4)
(This Is a common course number. Former course prefix/number CHM 102)
Prerequisite: Chemistry 1411. This course is for science and science-related majors. It is a continuation of Chemistry 1411. Previously learned and new concepts are applied. Topics include reaction kinetics and chemical equilibrium, acids, bases, salts and buffers, thermodynamics, colligative properties of solutions, electrochemistry, transition-metal chemistry, nuclear chemistry, qualitative inorganic analysis and an introduction to organic chemistry. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4005015239)

CHEM 2401 Quantitative Analysis (4)
(This Is a common course number. Former course prefix/number CHM 203)
Prerequisite: Chemistry 1412, Mathematics 1314 or Mathematics 1414. A survey of methods used in analytical chemistry: gravimetric and volumetric methods based on equilibria, oxidation-reduction, and acid-base theory, spectrophotometry, chromatography and electroanalytical chemistry. (2 Lec., 6 Lab.)
(Coordinating Board Academic Approval Number 4005025139)

CHEM 2402 Instrumental Analysis (4)
(Former course prefix/number CHM 234)
Prerequisite: Chemistry 2401 or demonstrated competence approved by the instructor. The role of modern electronic instrumentation in analysis is explored. Topics include infrared and ultraviolet spectroscopy, gas chromatography, potentiometric titration, electrochemistry, continuous flow analysis, scintillation counting, electrophoresis, flame photometry, and atomic absorption spectrophotometry as analytical tools. Laboratory fee. (2 Lec., 6 Lab.)
(Coordinating Board Academic Approval Number 4005025139)

CHEM 2423 Organic Chemistry I (4)
(This Is a common course number. Former course prefix/number CHM 201)
Prerequisite: Chemistry 1412. This course is for science and science-related majors. It introduces the fundamental classes of organic (carbon) compounds and studies aliphatic and aromatic hydrocarbons in detail. It includes occurrence, structure, stereo-chemistry, nomenclature, and reactions and mechanisms of synthesis. Lab includes: synthesis, purification by distillation, recrystallization, extraction and chromatography, and identification by spectroscopic, physical and chemical methods. Laboratory fee. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4005046239)
CHEM 2425 Organic Chemistry II (4)
(This is a common course number. Former course prefix/number CHM 202)
Prerequisite: Chemistry 2423. This course is for science and science-related majors. It is a continuation of Chemistry 2423. Topics studied include properties and syntheses of aliphatic and aromatic systems of aldehydes, ketones, carboxylic acids, esters, ethers, amines, alcohols and amides. Further topics include polynuclear and heterocyclic compounds, amino acids, proteins, lipids and carbohydrates. Laboratory includes qualitative organic analysis. Laboratory fee. (3 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4005045239)

CHILD DEVELOPMENT

(Formerly Early Childhood/Child Development)

CDEC 1174 Directed Participation in Child Development/Early Childhood (1)
(This is a local need course number. Former course prefix/number CDEC 1194)
This course provides in-depth observation and participation experiences and activities with young children at the Parent/Child Study Center and other appropriate early care and education facilities. It is repeated four times concurrently with required Child Development core or elective courses (2 Ext.)

CDEC 1175 Applied Learning in Child Development/Early Childhood (1)
(This is a local need course number. Former course prefix/number CDEC 1195)
This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate early care and education facilities. It is repeated four times concurrently with required Child Development core or elective courses. (2 Ext.)

CDEC 1179 Assessment of Prior Learning in Child Development/Early Childhood (1)
(This is a local need course number. Former course prefix/number CDEC 1195)
Prerequisite: Demonstrated competence approved by the program chair. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, noncollegiate experiences which have contributed to college-level learning, and documentation of such experiences under the direction of the instructor and based on the learning outcomes of specific courses. This course may be repeated for credit. (1 Lec.)

CDEC 1280 Cooperative Education-Early Childhood Provider/Assistant (2)
(This is a WECM course number. Former course prefix/number ECCD 7271)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)

CDEC 1303 Family and the Community (3)
(This is a WECM course number. Former course prefix/number ECCD 2370)
A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, child abuse, and current issues. There is a credit sequel to this course. This same course with the prefix/number TECA 1303 can be taken for academic transfer credit. See course TECA 1303. (3 Lec.)

CDEC 1315 Multicultural/Multilingual Education (3)
(This is a WECM course number. Former course prefix/number CDEC 1391)
An overview of multicultural education to include relationship with the family and community to develop awareness and sensitivity to diversity related to individual needs of children. (3 Lec.)

CDEC 1317 Child Development Associate Training I (3)
(This is a WECM course number. Former course prefix/number ECCD 2371)
Based on the requirements for the Child Development Associate National Credential (CDA). Three of the 13 functional areas of study included: family, program management, and professionalism. Topics on CDA overview, general observation skills, and child growth and development overview. Laboratory fee. (2 Lec., 2 Lab.)

CDEC 1318 Nutrition, Health and Safety (3)
(This is a WECM course number. Former course prefix/number ECCD 1374)
A study of nutrition, health, safety, and related activities, including skill development in management of issues, guidelines, and practices in nutrition, as well as community health, hygiene, safety, and legal implications. Integration of these principles applied to a variety of settings. There is a credit sequel to this course. This same course with the prefix/number TECA 1318 can be taken for academic transfer credit. See course TECA 1318. Laboratory fee. (2 Lec., 2 Lab.)
CDEC 1319 Child Guidance (3)
(This is a WECM course number. Former course prefix/number
ECCD 2373.)
An exploration of common behavior problems of young
children in an early childhood setting. Emphasis on
positive guidance techniques for effective behavior
management. Practical application through direct
participation in an early childhood setting. Laboratory
fee. (2 Lec., 2 Lab.)

CDEC 1323 Observation and Assessment (3)
(This is a WECM course number. Former course prefix/number
CDEC 2373)
A study of observation techniques of child development
assessment skills and techniques of children. (3 Lec.)

CDEC 1330 Growth and Development: 6-14
years (3)
(This is a WECM course number. Former course prefix/number
CDEC 1394)
A study of the principles of child growth and
development from six through thirteen years. Focus on
physical, cognitive, social, and emotional domains of
development. (3 Lec.)

CDEC 1335 Early Childhood Development: 3-5
years (3)
(This is a WECM course number. Former course prefix/number
CDEC 1393)
This course covers the principles of normal growth and
development from three to five years. Emphasis is on
physical, emotional, and social development. (3 Lec.)

CDEC 1339 Early Childhood Development: 0-3
years (3)
(This is a WECM course number. Former course prefix/number
CDEC 1392)
This course covers the principles of normal growth and
development from conception through three years of
age. Emphasis is on physical, intellectual, and social
development. (3 Lec.)

CDEC 1356 Emergent Literacy for Early
Childhood (3)
(This is a WECM course number.)
An exploration of principles, methods, and materials for
teaching young children language and literacy through a
play-based, integrated curriculum. Laboratory fee.
(2 Lec., 2 Lab.)

CDEC 1359 Children with Special Needs (3)
(This is a WECM course number. Former course prefix/number
ECCD 2372.)
A survey of information regarding children with special
needs including possible causes and characteristics of
exceptionalities, educational intervention, available
resources, referral processes, and the advocacy role
and legislative issues. (3 Lec.)

CDEC 1395 Special Topics in Early Childhood
Provider/Assistant (3)
(This is a WECM course number. Former course prefix/number
ECCD 2371.)
Topics address recently identified current events, skills,
knowledge, and/or attitudes and behaviors pertinent to
the technology or occupation and relevant to the
professional development of the student. (3 Lec.)

CDEC 1396 Special Topics in Administration of
Programs for Children (3)
(This is a WECM course number.)
Topics address recently identified current events, skills,
knowledge, and/or attitudes and behaviors pertinent to
the technology or occupation and relevant to the
professional development of the student. (3 Lec.)

CDEC 1411 Introduction to Early Childhood
Education (4)
(This is a WECM course number. Former course prefix/number
ECCD 1471)
An introduction to the profession of early childhood
education, focusing on developmentally appropriate
practices, types of programs, historical perspectives,
ethics, and current issues. There is a credit sequel to
this course. This same course with the prefix/number
TECA 1311 can be taken for academic transfer credit.
See course TECA 1311. Laboratory fee. (3 Lec., 2
Lab.)

CDEC 1413 Curriculum Resources for Early
Childhood Programs (4)
(This is a WECM course number. Former course prefix/number
ECCD 1472)
Fundamentals of curriculum design and implementation
in developmentally appropriate programs for young
children. Laboratory fee. (3 Lec., 2 Lab.)

CDEC 1421 The Infant and Toddler (3)
(This is a WECM course number. Former course prefix/number
CDEC 2421)
A study of appropriate infant and toddler programs (birth
to age 3), including an overview of development, quality
caregiving routines, appropriate environments, materials
and activities, and teaching/guidance techniques.
Laboratory fee. (3 Lec., 2 Lab.)

CDEC 1434 School Age Activities and Group
Dynamics (4)
(This is a WECM course number. Former course prefix/number
CDEC 1492)
This course explores the theoretical, developmental, and
practical application basis for school-age activities as a
means of facilitating children's education and
development. Laboratory fee. (3 Lec., 2 Lab.)
CDEC 1440 Instructional Techniques for Children with Special Needs (4)
(This is a WECM course number. Former course prefix/number CDEC 2473.)
Exploration of development and implementation of curriculum for children with special needs. Laboratory fee. (2 Lec., 6 Lab.)

CDEC 1454 Child Growth and Development (4)
(This is a WECM course number.)
A study of the principles of normal child growth and development from conception to adolescence. Focus on physical, cognitive, social, and emotional domains of development. There is a credit sequel to this course. This same course with the prefix/number TECA 1354 can be taken for academic transfer credit. See course TECA 1354. Laboratory fee. (3 Lec., 2 Lab.)

CDEC 2322 Child Development Associate Training II (3)
(This is a WECM course number. Former course prefix/number ECCD 2371.)
A continuation of the study of the requirements for the Child Development Associate National Credential (CDA). The six functional areas of study include safe, healthy, learning environment, self, social, and guidance. Laboratory fee. (2 Lec., 2 Lab.)

CDEC 2324 Child Development Associate Training III (3)
(This is a WECM course number.)
A continuation of the study of the requirements for the Child Development Associate National Credential (CDA). The four functional areas of study are creative, cognitive, physical, and communication. Laboratory fee. (2 Lec., 2 Lab.)

CDEC 2326 Administration of Programs for Children I (3)
(This is a WECM course number. Former course prefix/number ECCD 2376.)
A practical application of management procedures for early care and education programs, including a study of operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluation, and communication. Laboratory fee. (2 Lec., 2 Lab.)

CDEC 2328 Administration of Programs for Children II (3)
(This is a WECM course number. Former course prefix/number ECCD 2377.)
Prerequisites: Child Development 2326. A in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy, professionalism, fiscal analysis and planning, parent education/partnerships, and technical applications in programs. Laboratory fee. (2 Lec., 2 Lab.)

CDEC 2336 Administration of Programs for Children III (3)
(This is a WECM course number.)
An advanced study of the skills and techniques in managing early child care and education programs. (3 Lec.)

CDEC 2375 Abuse Within the Family (3)
(This is a local need course number. Former course prefix/number ECCD 2375.)
The symptoms and causes of abusive behaviors within the family are the focus of this course. Emphasis is on developing skills and competencies in working with the families to help them lessen and alleviate abusive behaviors and experiences. Laboratory fee. (2 Lec., 2 Lab.)

CDEC 2380 Cooperative Education-Early Childhood Provider/Assistant (3)
(This is a WECM course number. Former course prefix/number ECCD 7372.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)

CDEC 2441 The School Age Child (4)
(This is a WECM course number. Former course prefix/number ECCD 2371.)
A study of appropriate age (5 to 13 years) programs, including an overview of development, appropriate environments, materials and activities, and teaching/guidance techniques. Laboratory fee. (3 Lec., 2 Lab.)
CDEC 2475 Student Teaching in Child Development/Early Childhood I (4)
(This is a local need course number. Former course prefix/number ECCD 2470.)
Prerequisites: Child Development 1318, Child Development 1319, Child Development 1411, Child Development 1413, and Child Development 1454. This course provides in-depth observations and participation experiences and activities with young children at the Parent/Child Study Center and other appropriate child-care facilities. Laboratory fee. (2 Lec., 6 Lab.)

CDEC 2476 Student Teaching in Child Development/Early Childhood II (4)
(This is a local need course number. Former course prefix/number ECCD 2471.)
Prerequisites: Child Development 2475. This course provides application of child development learning theories with young children at the Parent/Child Study Center and other appropriate child-care facilities. Laboratory fee. (2 Lec., 6 Lab.)

CDEC 2481 Cooperative Education-Early Childhood Provider/Assistant (4)
(This is a WECM course number. Former course prefix/number ECCD 8481.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 21 Lab.)

TECA 1303 Family and the Community (3)
(This is an academic transfer credit course number.)
A study of the relationship between the child, the family, the community, and early childhood educators, including a study of parent education, family and community lifestyles, child abuse, and current issues. (3 Lec.)
(Coordinating Board Academic Approval Number 2001075133)

TECA 1311 Introduction to Early Childhood Education (3)
(This is an academic transfer credit course number.)
An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues. If you enroll in this academic transfer credit course, you must also enroll in course CDEC 1174. (3 Lec.)
(Coordinating Board Academic Approval Number 2002015133)

TECA 1318 Nutrition, Health and Safety (3)
(This is an academic transfer credit course number.)
A study of nutrition, health, and safety, including community health, universal health precautions, and legal implications. Practical applications of these principles in a variety of settings. (3 Lec.)
(Coordinating Board Academic Approval Number 2002015233)

TECA 1354 Child Growth and Development (3)
(This is an academic transfer credit course number.)
A study of the principles of normal child growth and development from conception to adolescence. Focus on physical, cognitive, social, and emotional domains of development. If you enroll in this academic transfer credit course you must also enroll in course CDEC 1175. Laboratory fee. (3 Lec.)
(Coordinating Board Academic Approval Number 1907065133)

CHINESE

CHIN 1311 Beginning Chinese (3)
(This is a common course number.)
This course is an introduction to Chinese speaking, comprehension, reading, writing and grammar. Cultural insights are also presented. Emphasis is on pronunciation, comprehension, and oral expression. It is strongly recommended that students who plan to study Chinese for more than one semester enroll in Chinese 1411 which includes an extra hour of lab per week (and an extra hour of credit for the course). Students who successfully complete Chinese 1311 and wish to continue their studies of Chinese may register for Chinese 1412. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1603015131)

CHIN 1411 Beginning Chinese I (4)
(This is a common course number. Former course prefix/number CHI 101)
This course is a beginning course in Chinese. Oral practice, elementary reading, and grammar will be stressed. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603015131)

CHIN 1412 Beginning Chinese II (4)
(This is a common course number. Former course prefix/number CHI 102)
Prerequisite: Chinese 1411 or the equivalent. This course continues the oral practice, elementary reading, and grammar studies begun in Chinese 1411. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603015131)
CHIN 2311 Intermediate Chinese I (3)
(This is a common course number. Former course prefix/number CHI 201)
Prerequisite: Chinese 1412 or the equivalent. Reading, cultural background, conversation, and composition are stressed in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 1603015231)

CHIN 2312 Intermediate Chinese II (3)
(This is a common course number. Former course prefix/number CHI 202)
Prerequisite: Chinese 2311 or the equivalent. This course is a continuation of Chinese 2311, with stress on reading, cultural background, conversation, and composition. (3 Lec.)
(Coordinating Board Academic Approval Number 1603015231)

COLLEGE LEARNING SKILLS
(See Developmental College Learning Skills)

COMMUNICATIONS

COMM 1336 Television Production I (3)
(This is a common course number. Former course prefix/number RTV 210)
Prerequisite: Journalism 1307 or demonstrated competence approved by the instructor. This course introduces the student to station organization, studio operation, and the use of studio equipment. Topics include continuity, camera operation, sound, lighting, and videotape recording. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

COMM 1337 Television Production II (3)
(This is a common course number. Former course prefix/number RTV 211)
Prerequisite: Communications 1336. This course is a continuation of Communications 1336. Emphasis is on the concept and technique of production of television broadcasts in practical situations. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

COMM 1370 Applied Communications (3)
(Former course prefix/number COM 131)
Prerequisite: An appropriate assessment test score (ACT, DCCCD, or SAT). This course focuses on student writing. It emphasizes reading and analytical thinking skills and introduces research skills. Students practice writing for a variety of audiences and purposes, primarily job-related. (3 Lec.)
(Coordinating Board Academic Approval Number 2311015135)

COMPUTER AIDED DESIGN AND DRAFTING

DFTG 1215 Architectural Blueprint Reading (2)
(This is a WECM course number. Former course prefix/number DFTG 1225)
A study of the fundamentals of blueprint reading for the construction industry. Laboratory fee. (1 Lec., 3 Lab.)

DFTG 1224 Blueprint Reading and Sketching (2)
(This is a WECM course number. Former course prefix/number BLPR 1270.)
An introduction to reading and interpreting the "working drawings" for manufactured products and associated tooling. Use of sketching techniques to create pictorial and multiple-view drawings of manufactured parts. Laboratory fee. (1 Lec., 3 Lab.)

DFTG 1271 CADD Operations (2)
(This is a local need course number. Former course prefix/number CADD 1270.)
A course in hardware selection, setup, and use of a CAD station. Emphasis is placed on control of the operating system, file management, and keyboarding. Topics address: software installation, hardware installation and configuration, such as mouse, tablet, printers, plotters, graphics adapters, and other configurable items such as communication ports, and serial ports. An introduction to work processing and spreadsheets is included. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Approval Pending)

DFTG 1329 Electro-Mechanical Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2385.)
A basic course including layout and design of electro-mechanical equipment from engineering notes and sketches. Emphasis on drawing of electronic equipment control panels, interior hardware, exterior enclosures, detailed and assembly drawings with a parts list, and flat pattern layouts. Laboratory fee. (2 Lec, 4 Lab.)
DFTG 1333 Mechanical Drafting (3)
(This is a WECM course number. Former course prefix/number DFT 105.)
An intermediate course covering detail drawings with proper dimensioning and tolerances, use of sectioning techniques, common fasteners, isometrics and oblique drawings, including bill of materials. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1344 Pipe Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2374.)
A study of pipe fittings, symbols, specifications and their applications to a piping process system. This application will be demonstrated through the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1348 Topographical Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 1370.)
A course in map drafting. Emphasis is given to plotting of surveyors field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1354 Architectural Drafting - Commercial (3)
(This is a WECM course number. Former course prefix/number CADD 2373.)
Architectural drafting procedures, practices and symbols, including preparation of detailed working drawings for commercial structure with emphasis on light frame construction methods. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1358 Electrical/Electronics Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2371.)
A study of the principles of layout of electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1372 Manufacturing Fundamentals (3)
(This is a local need course number. Former course prefix/number CADD 1371.)
A course in manufacturing fundamentals and production methods including NC-CNC concepts. Topics on interpreting and describing information required to produce a CNC program will be covered. An overview of the functions and role of CAD and its relationship to computer-aided manufacturing are studied. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Approval Pending)

DFTG 1373 CAD/Graphic Processes (3)
(This is a local need course number. Former course prefix/number CADD 1372.)
A course in creating, printing, and plotting graphics in CAD drawings. Skill development in importing text and raster graphics into CAD drawings, importing CAD vector graphics into desktop documents, scanning and editing raster graphics into CAD drawings, and publishing documents. Projects in coordinating text and graphics within a desktop publishing program will include printing black and white, and color publications. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1392 Special Topics in Architectural Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2384.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1394 Special Topics in Electrical/Electronics Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2381.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1395 Special Topics in Mechanical Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2375.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1405 Technical Drafting (4)
(This is a WECM course number. Former course prefix/number CADD 1470.)
Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. Laboratory fee. (2 Lec., 4 Lab.)
DFTG 1409 Basic Computer-Aided Drafting (4)
(This is a WECM course number. Former course prefix/number DFTG 1309)
An introduction to basic computer aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Laboratory fee. (2 Lec., 6 Lab.)

DFTG 1417 Architectural Drafting - Residential (4)
(This is a WECM course number. Former course prefix/number CADD 1471.)
Architectural drafting procedures, practices and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1421 Architectural Illustration (4)
(This is a WECM course number.)
Architectural drawing and sketching, including freehand drawing, perspectives, delineation in various media and development of students' graphical expression, including an introduction to various reproduction methods. Laboratory fee. (2 Lec., 6 Lab.)

DFTG 1452 Intermediate Computer-Aided Drafting (4)
(This is a WECM course number.)
A continuation of practices and techniques used in basic computer-aided drafting emphasizing batched files, scripted files, customized program menus, and extracted attributes. Introduction to three-dimensional drafting. Laboratory fee. (2 Lec., 6 Lab.)

DFTG 1454 Architectural Drafting – Commercial (4)
(This is a WECM course number.)
Architectural drafting procedures, practices and symbols including the preparation of detailed working drawings for a commercial building with emphasis on commercial construction methods. Laboratory fee. (2 Lec., 6 Lab.)

DFTG 1491 Special Topics in Drafting (4)
(This is a WECM course number. Former course prefix/number DFTG 1391)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2304 Printed Circuit Board Design (3)
(This is a WECM course number. Former course prefix/number CADD 2376.)
An intermediate course including single-sided and double-sided printed circuit board design, emphasizing the drawings, standards, and processed required to layout printed circuit board and manufacturing documentation. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2310 Structural Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2370.)
Discussion of detail drawings of structural shapes for fabrication with emphasis on framed and seated connectors and beam and column detailing. Designed to meet the standards of America Institute of Steel Construction, including units on concrete detailing conforming to America Concrete Institute standards. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2312 Technical Illustration (3)
(This is a WECM course number. Former course prefix/number CADD 2372 or ENGT 1272.)
Topics include pictorial drawing including isometrics, obliques, perspectives, charts, and graphs; shading, text; and use of different media. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2336 Computer-Aided Drafting Programming (3)
(This is a WECM course number. Former course prefix/number CADD 2386.)
Emphasis on the productivity of CAD software through development of computer-aided drafting programs with emphasis on database design, access techniques, and structure methods with particular application in engineering graphics. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2350 Geometric Dimensioning and Tolerancing (3)
(This is a WECM course number. Former course prefix/number CADD 2387.)
An introduction to geometric dimensioning and tolerancing, according to ANSI Y14.5 standards. Application of various geometric dimensions and tolerances to engineering drawings. Emphasis on cumulative effects on part function, gauging equipment, and inspection procedures. Laboratory fee. (2 Lec., 4 Lab.)
DFTG 2356 Advanced Printed Circuit Board Design (3)
(This is a WECM course number. Former course prefix/number CADD 2379.)
An advanced course including the layout of surface mounted components and integrated circuit modular design, emphasizing the design and drawing layouts required to produce surface mounted components and integrated circuit modular printed circuit boards. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2374 Integrated Circuit Design (3)
(This is a local need course number. Former course prefix/number CADD 2377.)
Skill development in the design of integrated circuits using current computer hardware and software. Instruction in active devices combines electronic theory and laboratory exercises to enable students to design simple integrated circuits from schematic diagrams and design rules. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2375 Advanced Integrated Circuit Design (3)
(This is a local need course number. Former course prefix/number CADD 2378.)
Skill development in the design of complex integrated circuits. Projects in schematic diagrams will require students to use two sets of design rules. Topics address meeting industrial standards of current technologies. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2380 Cooperative Education –Drafting (4)
(This is a WECM course number. Former course prefix/number CADD 8381)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (2 Lec., 24 Lab.)

DFTG 2381 Cooperative Education –Drafting (4)
(This is a WECM course number. Former course prefix/number CADD 8392)
Prerequisite: DFTG 2380. Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (2 Lec., 24 Lab.)

DFTG 2402 Machine Drafting (4)
(This is a WECM course number.)
Production of detail and assembly drawings of machines, threads, gears, cams, tolerances and limit dimensioning, surface finishes, and precision drawings. Laboratory fee. (2 Lec., 6 Lab.)

DFTG 2432 Advanced Computer-Aided Drafting (4)
(This is a WECM course number.)
Exploration of the use of system customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced applications, such as three-dimensional objects creation and linking graphic entities to external non-graphic data. Laboratory fee. (2 Lec., 6 Lab.)

DFTG 2440 Solid Modeling/Design (4)
(This is a WECM course number. Former course prefix/number DFTG 2340)
A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Laboratory fee. (2 Lec., 6 Lab.)

GRPH 1322 Electronic Publishing I (3)
(This is a WECM course number. Former course prefix/number CADD 1372)
An introduction to computer layout and design using major components of electronic publishing including text, graphics, and page layout and design using a computer. Introduction to the basic concepts and terminology associated with typography and page layout. Laboratory fee. (2 Lec., 4 Lab.)

INMT 1343 CAD-CAM (3)
(This is a WECM course number. Former course prefix/number ENGT 2270)
Computer-Assisted applications in integrating engineering graphics and manufacturing. Emphasis on the conversion of a working drawing using CAD-CAM software and related input and output devices to translate into machine code. Laboratory fee. (2 Lec., 4 Lab.)
ITNW 1192 Special Topics in Business Systems Networking and Telecommunications (1)
(This is a WECM course number. Former course prefix/number CISC 2170)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

ITNW 1280 Cooperative Education - Business Systems Networking and Telecommunications (2)
(This is a WECM course number. Former course prefix/number CISC 7271.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)

ITNW 1292 Special Topics in Business Systems Networking and Telecommunications (2)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

ITNW 1313 Local Area Networks Design and Protocols: Cisco 1 (3)
(This is a WECM course number. Former course prefix/number CISC 2373)
Prerequisite: Basic understanding of personal computers and operating systems or instructor approval. Skill development in the design and implementation of local area networks to ensure optimal throughput. Topics include cabling, cable closets, management of devices, selection and installation of devices, protocols, and subnets. Laboratory fee. (2 Lec., 4 Lab.)

ITNW 1317 Basic Router Configuration: Cisco 2 (3)
(This is a WECM course number. Former course prefix/number CISC 2373 and CISC 2484)
Prerequisite: ITNW 1313. An introduction to Cisco basic router configuration for local area networks. Topics include initial router configuration for TCP/IP, management of the configuration, backup of router configuration files, routing protocols, and the use of security features. Laboratory fee. (2 Lec., 4 Lab.)

ITNW 1321 Introduction to Networking (3)
(This is a WECM course number. Former course prefix/number CISC 1372.)
Introduction to the fundamentals, basic concepts, and terminology of networks. Topics include the access and use of the Internet and networking hardware and software, including current developments in networking. Laboratory fee. (2 Lec., 2 Lab.)

ITNW 1340 Local Area Management (LAN): Cisco 3 (3)
(This is a WECM course number. Former course prefix/number CISC 2373 and CISC 2484)
Prerequisite: ITNW 1317. Skill development in managing traffic in local area networks (LAN) and in the management of network devices for LANs. Topics include configuring routers for the IPX protocol, filtering traffic in an IPX environment, and identifying and resolving network congestion problems. Laboratory fee. (2 Lec., 4 Lab.)

ITNW 1343 Network Technologies (Novell 565) (3)
(This is a WECM course number. Former course prefix/number CISC 1380.)
Suggested prerequisite: ITNW 1321 or instructor approval. An introduction to networking technologies. Topics include basic computer networking terminology and concepts, contemporary network services, transmission media, protocols, the OSI reference model, networking hardware and software, routing, bridging, switching, IP addressing and subnetting. (3 Lec.)

ITNW 1344 Wide Area Management (WAN): Cisco 4 (3)
(This is a WECM course number. Former course prefix/number CISC 2484)
Prerequisite: ITNW 1340. An introduction to wide area networking (WAN) services and management. Topics include configuring and monitoring WAN services, encapsulating WAN data, and WAN protocols. Laboratory fee. (2 Lec., 4 Lab.)
ITNW 1380 Cooperative Education - Business Systems Networking and Telecommunications (3)
(This is a WECM course number. Former course prefix/number CISC 7471)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITNW 1392 Special Topics in Business Systems Networking and Telecommunications (3)
(This is a WECM course number. Former course prefix/number CISC 2372)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

ITNW 1419 Installing and Administering Windows 2000 (4)
(This is a WECM course number. Former course prefix/number CISC 2484)
An introduction to Microsoft® Windows 2000 operating system in a single domain environment. Topics include basic installation, configuration tasks, and day-to-day administration tasks in a Windows 2000-based network. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1420 NetWare 5 Administration (4)
(This is a WECM course number. Former course prefix/number CISC 2460)
Suggested Prerequisite: ITNW 1321 or instructor approval. An introduction to NetWare 5 Administration. Topics include network components, user accounts and groups, network file systems, file system security, NDS security, NDPS printing, application management, and workstation management. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1425 Fundamentals of Networking (4)
(This is a WECM course number. Former course prefix/number CISC 2370)
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1433 Microsoft Networking Essentials (4)
(This is a WECM course number. Former course prefix/number CISC 2370)
Instruction in networking essential concepts including the OSI reference model, network protocols, transmission media, and networking hardware and software. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1437 Introduction to the Internet (4)
(This is a WECM course number. Former course prefix/number CISC 1376)
Introduction to the Internet with emphasis on using the World Wide Web to locate, transfer, and publish information. Survey of emerging technologies on the Internet. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1446 Microsoft Exchange Server 5.5 Series - Concepts and Administration (4)
(This is a WECM course number. Former course prefix/number CISC 2484)
Skills development in the day-to-day management of an established Exchange Server Organization using Microsoft® Exchange Server. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1448 Implementing and Supporting Windows NT Workstation 4.0 (4)
(This is a WECM course.)
Skills development in the management of Windows NT Workstation 4.0 as a desktop operating system and as a networked client. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1452 Internetworking Microsoft TCP/IP on Microsoft Windows NT 4.0 (4)
(This is a WECM course number. Former course prefix/number CISC 2465 and CISC 2373)
A course in the skill development for set up, configuration, use and support Transmission Control Protocol/Internet Protocol (TCP/IP) on Microsoft® Windows NT operating system version 4.0. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1454 Implementing and Supporting Windows NT Server 4.0 (4)
(This is a WECM course number. Former course prefix/number CISC 2488)
A course in the development of skills necessary to implement, administer, and troubleshoot information systems that incorporate Windows NT Server 4.0 in a networked computing environment. Laboratory fee. (3 Lec., 4 Lab.)
ITNW 1456 Implementing Microsoft Internet Explorer 4.0 (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
An introduction to the architecture and features of Microsoft® Internet Explorer version 4.0. Topics include set up, configuration, use, and deployment of Internet Explorer in a network environment. Laboratory fee (3 Lec., 4 Lab.)

ITNW 1458 Supporting Microsoft Windows 2000 (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Skill development for customizing, configuring, supporting, and troubleshooting Windows 2000. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 1492 Special Topics in Business Systems Networking and Telecommunications (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2330 Fundamentals of Internetworking (3)
(This is a WECM number. Former course prefix/number CISC 2379.)
Suggested prerequisite: ITNW 1321 or instructor approval. Advanced concepts of internetworking to include internetworking devices and protocols. Topics include the OSI Reference Model, distance vector and link state routing protocols, routers and bridges. Laboratory fee. (2 Lec., 2 Lab.)

ITNW 2337 Network Management Using ManageWise (3)
(This is a WECM number. Former course prefix/number CISC 2380.)
Suggested prerequisite: ITNW 1420 or instructor approval. Instruction in the implementation of ManageWise. Topics include monitoring critical systems on an internetwork, troubleshooting printing problems, and optimizing network performance. Laboratory fee. (2 Lec., 2 Lab.)

ITNW 2342 Novell Directory Services (NDS) Design and Implementation for NetWare 5 (3)
(This is a WECM number. Former course prefix/number CISC 2378.)
Suggested prerequisite: ITNW 2438 or instructor approval. A course in designing and implementing Novell Directory Services (NDS). Topics include partitioning, replication, time synchronization, and strategies for directory tree structure and object placement. Laboratory fee. (2 Lec., 2 Lab.)

ITNW 2401 Administering Microsoft Windows NT (4)
(This is a WECM course number. Former course prefix/number CISC 2462 and CISC 2484.)
Development of knowledge and skills necessary to perform post-installation and day-to-day administration tasks in a single-domain or multiple-domain Windows NT based network. Laboratory fee (3 Lec., 4 Lab.)

ITNW 2413 Networking Hardware (4)
(This is a WECM course number. Former course prefix/number CISC 2488.)
Preparation to work with and maintain network hardware devices. Topics include network cables, servers, and workstations; network connectivity devices such as routers, hubs, bridges, gateways, repeaters, and uninterruptible power supplies; and other networking hardware devices. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2417 Network Security (4)
(This is a WECM course number.)
Instruction in security for network hardware, software, and data including physical security, backup procedures, firewalls, encryption, and protection from viruses. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2421 Networking with TCP/IP (4)
(This is a WECM course number.)
Preparation to set up, configure, use, and support Transmission Control Protocol/Internet Protocol (TCP/IP) on networking operating systems. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2431 Novell Service and Support (4)
(This is a WECM number. Former course prefix/number CISC 2497.)
Suggested prerequisite: ITNW 2342 and ITNW 2438 or instructor approval. Instruction in the techniques used to troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hardware/software. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2435 Network Troubleshooting and Support (4)
(This is a WECM course number. Former course prefix/number CISC 2485.)
Instruction in the techniques used to troubleshoot and support networks with emphasis on solving real world problems in a hands-on environment. Topics include troubleshooting and research techniques, available resources, and network management hard/software. Laboratory fee. (3 Lec., 4 Lab.)
ITNW 2438 NetWare 5 Advanced Administration (4)
(This is a WECM course number. Former course prefix/number CISC 2461.)
Suggested prerequisite: ITNW 1321 or ITNW 1343 and ITNW 1420 or instructor approval. Skill development in the configuration and administration of a NetWare 5 network. Topics include upgrading to NetWare 5, upgrading to queue-based printing to Novell Distributed Print Services, optimizing the NetWare server, installing and configuring a FastTrack web server and FTP server on a NetWare server, configuring a NetWare 5 server and workstations for Domain Name Service (DNS) and Dynamic Host Configuration Protocol (DHCP). Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2441 NetWare: Integrating Windows NT (4)
(This is a WECM course. Former course prefix/number CISC 2468.)
Suggested prerequisite: ITNW 1420 and ITNW 2438 or instructor approval. Skill development in integrating Windows NT and NetWare. Topics include administering and managing NT workstations, NT servers, and network-based applications in a mixed NetWare and Windows NT environment. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2449 Securing Intranets with Border Manager (4)
(This is a WECM number. Former course prefix/number CISC 2484.)
Suggested prerequisite: ITNW 1420 or instructor approval. Instruction in the implementation of BorderManager including installation, administration, maintenance, and implementation of access control and troubleshooting components. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2451 Microsoft Windows NT Core Technologies (4)
(This is a WECM course number. Former course prefix/number CISC 2463 and CISC 2471.)
Foundation course for supporting a network operating system. Skill development in installing, configuring, customizing, optimizing, networking, integrating, and troubleshooting a network operating system. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2452 Administering Microsoft SQL Server 7.0 (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Administering Microsoft SQL Server 7.0 is a skills development course in the installation, configuration, administration, and troubleshooting of Microsoft® SQL ServerTM client/server database management system version 7.0. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2453 Supporting Microsoft Proxy Server 2.0 (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
An introduction to Microsoft Proxy Server 2.0 including installation, configuration, and troubleshooting Basic architecture, methods of controlling Internet access, using Internet Service Manager to administer Proxy Server, configuring the cache, enhancing Performance Monitor, and methods of improving performance. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2454 Internet/Intranet Server (4)
(This is a WECM course number.)
Hands-on experience in designing, installing, configuring, maintaining, and managing an Internet server. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2455 Supporting Microsoft Windows NT Server 4.0 - Enterprise Technologies (4)
(This is a WECM course number. Former course prefix/number CISC 2464 and CISC 2484.)
This course prepares students to design, implement, and support the Windows NT Server network operating system in a multi-domain enterprise environment. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2457 Windows 2000 Active Directory (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Advanced concepts of planning and implementing Microsoft Windows 2000 Active Directory in an enterprise environment. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2458 Microsoft Exchange Server 5.5 Series - Design and Implementation (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
An in-depth study of electronic messaging using Microsoft Exchange Server 5.5. Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2459 Creating and Managing a Web Server Using Microsoft Internet Information Server (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Instruction in the installation configuration, and implementation of Microsoft Internet Information Server (IIS). Laboratory fee. (3 Lec., 4 Lab.)

ITNW 2471 Administering Microsoft SMS 2.0 (4)
(This is a local need course number. Former course prefix/number CISC 2484.)
Suggested prerequisite: ITNW 2451. Instruction in the administration of Systems Management Server (SMS) 2.0. Topics include client discovery and installation, software distribution, hardware and software inventory, software metering, and remote tools. Laboratory fee. (3 Lec., 4 Lab.)
ITNW 2472 Displaying and Supporting Microsoft SMS 2.0 (4)
(This is a local need course number. Former course prefix/number CISC 2484.)
Instruction in deploying and supporting Microsoft Systems Management Server (SMS) 2.0. Topics include designing sites, organizing a site hierarchy, planning for resource needs, installing clients, site-to-site communications, and troubleshooting site installation problems. Laboratory fee. (3 Lec., 4 Lab.)

ITSC 1280 Cooperative Education - Computer and Information Sciences, General (2)
(This is a WECM course number. Former course prefix/number CISC 7271.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)

ITSC 1281 Cooperative Education - Computer and Information Sciences, General (3)
(This is a WECM course number. Former course prefix/number CISC 7471.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSC 1381 Cooperative Education - Computer and Information Sciences, General (3)
(This is a WECM course number. Former course prefix/number CISC 7472.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSC 1401 Introduction to Computers (4)
(This is a WECM course number. Former course prefix/number CISC 1470)
Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and application in business and other segments in society. Fundamentals of computer problem-solving and programming may be discussed and applied. Examines applications and software relating to a specific curricular area. Laboratory fee. (3 Lec., 4 Lab.)

ITSC 1405 Introduction to PC Operating Systems (4)
(This is a WECM course number. Former course prefix/number CISC 2478)
Topics include installation and configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. Laboratory fee. (3 Lec., 3 Lab.)

ITSC 1409 Integrated Software Applications I (4)
(This is a WECM course number.)
Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word process, spreadsheets, databases, and/or presentation media software. Laboratory fee. (3 Lec., 4 Lab.)

ITSC 1413 Internet/Web Page Development (4)
(This is a WECM course number.)
The student will identify basic Internet concepts and terminology; use electronic communication methods; collect and evaluate research data using the Internet; and design, create, organize, and publish web pages and sites. Laboratory fee. (3 Lec., 4 Lab.)
ITSC 1417  PC Operating Systems· DOS (4)
(This is a WECM course number.)
Introduction to the DOS operating system. Topics include installation and configuration, file management, memory and storage management, peripheral device control, and use of utilities. Laboratory fee. (3 Lec., 3 Lab.)

ITSC 1421  PC Operating Systems· Windows (4)
(This is a WECM course number.)
Introduction to windows-based microcomputer operating systems. Topics include installation and configuration, file management, memory and storage management, peripheral device control, and use of utilities. Laboratory fee. (3 Lec., 3 Lab.)

ITSC 1425  Personal Computer Hardware (4)
(This is a WECM course number. Former course prefix/number CISC 2480.)
A study of current personal computer hardware including personal computer assembly and upgrading, setup and configuration, and troubleshooting. Laboratory fee. (3 Lec., 3 Lab.)

ITSC 2431  Integrated Software Applications III (4)
(This is a WECM course number.)
Prerequisite: ITSC 1409 or instructor consent. Designed for advanced users with emphasis on a wide range of productivity tasks including complex assignments that require advanced formatting and functionality. Laboratory fee. (3 Lec., 3 Lab.)

ITSC 2435  Application Problem Solving (4)
(This is a WECM course number. Former course prefix/number CISC 1471.)
Analysis and design methods and tools are studied and applied to practical situations involving various business functions. Utilization of current application software to solve advanced problems and generate customized solutions, involving projects and software specific to a specific curricular area. Topics include problem solving skills, logic structures, and programming. Laboratory fee. (3 Lec., 4 Lab.)

ITSC 2439  Personal Computer Help Desk (4)
(This is a WECM course number.)
Prerequisite: ITSC 1405 and (ITSW 1401 or ITSW 2431) and (ITSW 1404 or ITSW 1434) and (ITSW 1407 or ITSW 2437) or instructor consent. Diagnosis and solution of user hardware and software related problems with on-the-job projects in either a Help Desk lab or in short-term assignments for local business. (2 Lec., 4 Lab.)

ITSE 1191  Special Topics in Computer Programming (1)
(This is a WECM course number. Former course prefix/number CISC 2170.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

ITSE 1280  Cooperative Education· Computer Programming (2)
(This is a WECM course number. Former course prefix/number CISC 7271.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)

ITSE 1281  Cooperative Education· Computer Programming (2)
(This is a WECM course number. Former course prefix/number CISC 7272.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)
ITSE 1291 Special Topics in Computer Programming (2)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

ITSE 1380 Cooperative Education - Computer Programming (3)
(This is a WECM course number. Former course prefix/number CISC 7471.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSE 1381 Cooperative Education - Computer Programming (3)
(This is a WECM course number. Former course prefix/number CISC 7472.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSE 1391 Special Topics in Computer Programming (3)
(This is a WECM course number. Former course prefix/number CISC 2372.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)

ITSE 1402 Introduction to Computer Programming (4)
(This is a WECM course number. Former course prefix/number CISC 1476.)
Introduction to computer programming with emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1407 Introduction to C++ Programming (4)
(This is a WECM course number.)
Introduction to computer programming using C++. Emphasis on the fundamentals of structured design with development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1414 Introduction to RPG Programming (4)
(This is a WECM course number. Former course prefix/number CISC 1478.)
Introduction to computer programming using RPG. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1418 Introduction to COBOL Programming (4)
(This is a WECM course number. Former course prefix/number CISC 1476.)
Introduction to computer programming using COBOL. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1422 Introduction to C Programming (4)
(This is a WECM course number. Former course prefix/number CISC 2474.)
Introduction to computer programming using C. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)
ITSE 1431 Introduction to Visual BASIC Programming (4)
(This is a WECM course number. Former course prefix/number CISC 1373.)
Introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1440 Mastering Distributed Application Design and Development Using Microsoft Visual Basic 6.0 (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
An introduction to the creation of enterprise-level applications and the use of appropriate design tools and technology with Microsoft Visual Studio 6.0. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1444 Mastering Microsoft Visual Basic 6.0 Development (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Skill development in the creation of database applications using component object model (COM). Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1445 Introduction to Oracle SQL and PL/SQL (4)
(This is a WECM course number.)
An introduction to the design and creation of relational databases. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL) and Procedure Language (PL). Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1450 System Analysis and Design (4)
(This is a WECM course number. Former course prefix/number CISC 2479.)
Prerequisite: Any ITSE programming course or instructor consent. Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 1491 Special Topics in Computer Programming (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2401 Introduction to Windows Programming Using C++ (4)
(This is a WECM course number.)
Introduction to computer programming for windows using C++. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2405 Introduction to Windows Programming (4)
(This is a WECM course number.)
Introduction to computer programming for windows. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2409 Introduction to Database Programming (4)
(This is a WECM course number. Former course prefix/number CISC 1472.)
Application development using database programming techniques emphasizing database structures, modeling, and database access. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2413 Web Authoring (4)
(This is a WECM course number.)
Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2417 JAVA Programming (4)
(This is a WECM course number.)
Introduction to JAVA programming with object-orientation. Emphasis on the fundamental syntax and semantics of JAVA for applications and web applets. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2421 Introduction to Object-Oriented Programming (4)
(This is a WECM course number. Former course prefix/number CISC 2487.)
Introduction to object-oriented programming. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes object-oriented programming techniques, classes, and objects. Laboratory fee. (3 Lec., 4 Lab.)
ITSE 2431 Advanced C++ Programming (4)
(This is a WECM course number.)
Prerequisite: ITSE 1407 or instructor consent. The student will develop correct, well documented programs containing complex data structures; incorporate complex input/output file handling techniques; create classes and objects in programs; and incorporate advanced C++ techniques. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2433 Implementing a Database on Microsoft SQL Server 7.0 (4)
(This is a WECM course number. Former course prefix CISC 2484.)
Skills development in the implementation of a database solution using Microsoft SQL Server client/server database management system version 7.0. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2435 Advanced RPG Programming (4)
(This is a WECM course number. Former course prefix/number CISC 2492.)
Prerequisite: ITSE 1414 or instructor consent. Further application of RPG programming techniques, including file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2437 Assembly Language Programming (4)
(This is a WECM course number. Former course prefix/number CISC 2475.)
Prerequisite: Any ITSE programming course or instructor consent. Comprehensive coverage of low-level computer operations and architecture. Includes design, development, testing, implementation, and documentation of programs; language syntax; data manipulation; input/output and file handling. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2439 Advanced Windows Programming Using C++ (4)
(This is a WECM course number.)
Prerequisite: ITSE 2401 or instructor consent. Further applications of windows programming techniques using C++ including file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2443 Advanced Windows Programming (4)
(This is a WECM course number.)
Prerequisite: ITSE 2405 or instructor consent. Further applications of windows programming techniques, including file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2445 Data Structures (4)
(This is a WECM course number.)
Prerequisite: Any ITSE Introductory programming course or instructor consent. Further applications of programming techniques. Topics include file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2447 Advanced Database Programming (4)
(This is a WECM course number. Former course prefix/number CISC 2472.)
Prerequisite: ITSE 2409 or instructor consent. Application development using complex database programming techniques emphasizing multiple interrelated files, menu design, security implementation, and multiple access. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2449 Advanced Visual BASIC Programming (4)
(This is a WECM course number.)
Prerequisite: ITSE 1431 or instructor consent. Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2450 Mastering Enterprise Development Using Microsoft Visual Basic 6.0 (4)
(This is a WECM course number. Former course prefix CISC 2484.)
In-depth development of client/server solutions using component object modeling (COM). Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2451 Advanced COBOL Programming (4)
(This is a WECM course number. Former course prefix/number CISC 1477.)
Prerequisite: ITSE 1418 or instructor consent. Further applications of programming techniques using COBOL, including file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2454 Advanced Oracle SQL and PL/SQL (4)
(This is a WECM course number.)
Prerequisite: ITSE 1445 or instructor consent. A continuation of Oracle SQL and PL/SQL. Topics include hierarchical queries, set based queries, correlated subqueries, scripting, and scripting generation. Laboratory fee. (3 Lec., 4 Lab.)
ITSE 2455 Advanced C Programming (4)  
(This is a WECM course number. Former course prefix/number CISC 2486.)  
Prerequisite: ITSE 1422 or instructor consent. Further applications of programming techniques using C. Topics include file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2456 Oracle Database Administration I (4)  
(This is a WECM course number.)  
Fundamentals of the tasks and functions required of a database administrator. Topics include managing database files; managing table spaces, segments, extents, and blocks; start up and shut down of an Oracle instance and database; managing users, privileges and resources; using National Language and Support (NLS) features; and creation of an operational database. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2457 Advanced Object-Oriented Programming (4)  
(This is a WECM course number.)  
Prerequisite: ITSE 2421 or instructor consent. Application of advanced object-oriented programming techniques such as abstract data structures, class inheritance, virtual functions, and exception handling. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2458 Oracle Database Administration II (4)  
(This is a WECM course number.)  
Prerequisite: ITSE 2456 or instructor consent. A continuation of Oracle Database Administration I. Topics include recovery procedures, logical backups, standby database capabilities, and performance tuning of the Oracle Server. Common performance problems and the use of diagnostic tools to troubleshoot and optimize throughput will be discussed. Laboratory fee. (3 Lec., 4 Lab.)

ITSE 2459 Advanced Computer Programming (4)  
(This is a WECM course number. Former course prefix/number CISC 1477.)  
Prerequisite: ITSE 1402 or instructor consent. Further applications of programming techniques. Topics include file access methods, data structures, modular programming, program testing, and documentation. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 1192 Special Topics in Management Information Systems and Business Data Processing, General (1)  
(This is a WECM course number. Former course prefix/number CISC 2170.)  
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (1 Lec.)

ITSW 1280 Cooperative Education - Data Processing Technology/Technician (2)  
(This is a WECM course number. Former course prefix/number CISC 7271.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)

ITSW 1281 Cooperative Education - Data Processing Technology/Technician (2)  
(This is a WECM course number. Former course prefix/number CISC 7272.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)

ITSW 1282 Cooperative Education - Management Information Systems and Business Data Processing, General (2)  
(This is a WECM course number. Former course prefix/number CISC 7271.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)
ITSW 1283 Cooperative Education - Management Information Systems and Business Data Processing, General (2)
(This is a WECM course number. Former course prefix/number CISC 7272.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 10 Lab.)

ITSW 1292 Special Topics in Management Information Systems and Business Data Processing, General (2)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec.)

ITSW 1327 Multiuser Operating Systems (3)
(This is a WECM course number.)
Summary of multi-user operating systems including a contrast of single user and multi-user systems. Investigation of a variety of multi-user operating systems, similarities, and differences. Laboratory fee. (3 Lec.)

ITSW 1380 Cooperative Education - Data Processing Technology/Technician (3)
(This is a WECM course number. Former course prefix/number CISC 7471.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSW 1381 Cooperative Education - Data Processing Technology/Technician (3)
(This is a WECM course number. Former course prefix/number CISC 7472.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSW 1382 Cooperative Education - Management Information Systems and Business Data Processing, General (3)
(This is a WECM course number. Former course prefix/number CISC 7471.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSW 1383 Cooperative Education - Management Information Systems and Business Data Processing, General (3)
(This is a WECM course number. Former course prefix/number CISC 7472.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

ITSW 1392 Special Topics in Management Information Systems and Business Data Processing, General (3)
(This is a WECM course number. Former course prefix/number CISC 2372.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (2 Lec., 2 Lab.)
ITSW 1401 Introduction to Word Processing (4)
(This is a WECM course number. Former course prefix/number CISC 1474.)
An overview of the production of documents, tables, and graphics. Topics include entry and editing, reformattinf, search and replace, cut-and-paste, file and print operations, and spelling checkers. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 1402 Computer Control Language (4)
(This is a WECM course number. Former course prefix/number CISC 2470.)
Skill development in the use of system control language on mini/mid-range/mainframe computers. Topics include command formats, file management, job scheduling, resource management, and utilities. Laboratory fee. (3 Lec., 3 Lab.)

ITSW 1404 Introduction to Spreadsheets (4)
(This is a WECM course number. Former course prefix/number CISC 2476.)
Instruction in the concepts, procedures, and importance of electronic spreadsheets. Topics include formula creation, template design, formatting features, statistical, mathematical and financial functions, file operations, report generation, graphics, and introduction to macro programming. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 1406 UNIX Operating System I (4)
(This is a WECM course number. Former course prefix/number CISC 1460.)
A study of the UNIX operating system including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts. Laboratory fee. (3 Lec., 3 Lab.)

ITSW 1407 Introduction to Database (4)
(This is a WECM course number. Former course prefix/number CISC 2481.)
Introduction to database theory and the practical applications of a database. Topics include terminology, database design, table structures, report forms, queries and macros. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 1410 Presentation Media Software (4)
(This is a WECM course number. Former course prefix/number CISC 2375.)
Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in presentation development. Topics include product documentation, creating user guides and reference manuals, using tutorials, evaluating and using training materials. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 1411 AS/400 Operating System I (4)
(This is a WECM course number. Former course prefix/number CISC 1473 and CISC 2484.)
A study of the AS/400 operating system including multi-user concepts, terminal emulation, use of system editor, basic AS/400 menus, commands, and help screens. Topics include introductory system management concepts and file management. Laboratory fee. (3 Lec., 3 Lab.)

ITSW 1413 Introduction to Data Entry (4)
(This is a WECM course number. Former course prefix/number CISC 1371.)
Training in data input. Includes source documents, conversion of source data into computer input media, input record layout design, and input coding. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 1492 Special Topics in Management Information Systems and Business Data Processing, General (4)
(This is a WECM course number. Former course prefix/number CISC 2484.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 2401 Fundamental of Geographic Information Systems (GIS) (4)
(This is a WECM course number. Former course prefix/number ITSE 1407 or instructor consent.)
Introduction to the use of geographic information systems software for planning and problem-solving. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 2431 Advanced Word Processing (4)
(This is a WECM course number. Former Course prefix/number OFCT 2372.)
Prerequisite: ITSW 1401 or instructor consent. Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting for technical documents. Laboratory fee. (3 Lec., 4 Lab.)
ITSW 2434 Advanced Spreadsheets (4)
(This is a WECM course number.)
Prerequisite: ITSW 1404 or instructor consent.
Designed to provide an understanding of advanced functionality of electronic spreadsheets. Topics include mathematical and financial functions, advanced formatting, graphics and macros. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 2436 UNIX Operating System II (4)
(This is a WECM course number. Former course prefix/number CISC 2490.)
Prerequisite: ITSW 1406 or instructor consent.
Advanced study of the UNIX operating system. Includes advanced concepts of system management and communication, the installation and maintenance of software, network security, and data integrity issues. Laboratory fee. (3 Lec., 3 Lab.)

ITSW 2437 Advanced Database (4)
(This is a WECM course number.)
Prerequisite: ITSW 1407 or instructor consent.
Designed to provide an understanding of advanced functionality of databases. Topics include advanced data manipulation features, importing and exporting data, and advanced macros and programming. Laboratory fee. (3 Lec., 4 Lab.)

ITSW 2441 AS/400 Operating System II (4)
(This is a WECM course number. Former course prefix/number CISC 1475 and CISC 2484.)
Prerequisite: ITSW 1411 or instructor consent.
Advanced study of the AS/400 operating system. Topics include advanced concepts of systems management and communications, installation and maintenance of software, network security, and data integrity. Laboratory fee. (3 Lec., 3 Lab.)

COMPUTER SCIENCE

COSC 1300 Computer Literacy (3)
(This is a common course number.)
This course develops the ability to use computer-based technology in communicating, solving problems, and acquiring information. An emphasis will be placed on the student's understanding of the limits, problems, and possibilities associated with the use of computer and communication technology. Students will develop the critical thinking skills necessary to evaluate and learn new technologies as they become available. COSC 1300 is intended for majors in the liberal arts and may not be applied towards a computer science major or minor. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1102015127)

COSC 1315 Computer Science I (3)
(This is a common course number. Former course prefix/number CS 113)
This introductory course is designed to meet the requirements for a four-year degree with a major or minor in computer science, mathematics, or a scientific field. This course will focus on problem-solving using modular design techniques implemented with a structured programming language. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1102015227)

COSC 1317 Introduction To FORTRAN Programming (3)
(This is a common course number. Former course prefix/number CS 121)
Prerequisite: Mathematics 1414. This course is intended primarily for students pursuing a degree in an engineering, science, or related field which requires a one-semester course in FORTRAN programming. Emphasis is on the use of the FORTRAN language in technical applications. Topics include input/output, structures, and formatting. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1102015227)

COSC 1320 C Programming (3)
(This is a common course number. Former course prefix/number CS 120)
Prerequisite: Two years of high school algebra or Developmental Math 0093 or demonstrated competence approved by the instructor. This introductory course is designed to meet the requirements for a four-year degree with a major or minor in computer science, mathematics, or a scientific field. The emphasis is on the fundamentals of programming using the C Programming language. Topics covered include input/output processing, structured programming, modular design and problem-solving techniques. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1102015227)

COSC 1333 Introduction To PL/I Programming (3)
(This is a common course number. Former course prefix/number CS 123)
Prerequisites: Developmental Math 0093 and Computer Science 1315 or Computer Information Systems 1470 or demonstrated competence approved by the instructor. This course is an introduction to the PL/I programming language. Emphasis is placed upon the structured approach to program design using both mathematical and business applications. Topics include string processing, simple data structures, internal search/soft techniques, and sequential file processing. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1102015127)
COSC 1401 Microcomputer Concepts and Applications (4)
(This is a common course number.)
This course introduces the use of computers in business organizations, professional activities and personal life. Topics include terminology, hardware and software, applications and systems development, networking and the use of contemporary software. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1101015227)

COSC 2315 Computer Science II (3)
(This is a common course number.)
Prerequisites: Computer Science 1315 and Mathematics 1414 or demonstrated competence approved by the instructor. This course is a continuation of Computer Science 1315 and is designed to meet the requirements for a degree in computer science or related field. Topics covered include structured problem-solving, elementary and advanced data structures, the use of pointer variables and references, and an introduction to object-oriented programming. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1102015327)

COSC 2318 Computer Science II - Pascal (3)
(This is a common course number. Former course prefix/number CS 114)
Prerequisites: Mathematics 1414 and Computer Science 1315 or demonstrated competence approved by the instructor. This course is a continuation of Computer Science 1315 and is designed to meet the requirements for a degree in computer science or a related field. Topics covered include structured problem-solving, elementary data structures including arrays, records, files, and the use of pointer variables. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1102015327)

COSC 2320 Advanced C Programming (3)
(This is a common course number. Former course prefix/number CS 220)
Prerequisite: Computer Science 1320 and Mathematics 1314 or Mathematics 1414 or demonstrated competence approved by the instructor. This course is a continuation of Computer Science 1320 and is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a continuation of C Programming, structured problem-solving, elementary and advanced data structures including arrays, structures, and classes, the use of pointer variables and an introduction to object-oriented programming. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1102015227)

COSC 2425 Assembly Language (4)
(This is a common course number. Former course prefix/number CS 212/COSC 225)
Prerequisite: Computer Science 1315 or demonstrated competence approved by the instructor. This course is designed to meet the requirements for a degree in computer science or a related field. Topics covered include a study of assembly language programming, machine representation of data and instructions, and addressing techniques. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1102015227)

CONSTRUCTION MANAGEMENT AND TECHNOLOGY

BMGT 1313 Principles Of Purchasing (3)
(This is a WECM course number. Former course prefix/number CMGT 2370 or MGMT 1373.)
The purchasing process as it relates to such topics as inventory control, price determination, vendor selection, negotiation techniques, and ethical issues. (3 Lec.)

CNBT 1301 Introduction To Construction (3)
(This is a WECM course number. Former course prefix/number CMGT 1270.)
An overview of the construction industry including: organizational structures and systems; safety regulations and agencies; construction documents; office and field organizations; and the various construction crafts and trades. (3 Lec.)

CNBT 1302 Mechanical, Plumbing, And Electrical Systems In Construction (3)
(This is a WECM course number. Former course prefix/number CMGT 1373.)
A presentation of the basic mechanical, plumbing, and electrical components in construction and their relationship to the overall building. Laboratory fee. (3 Lec., 1 Lab.) (3 Lec., 3 Lab.)

CNBT 1307 Commercial And Industrial Blueprint Reading (3)
(This is a WECM course number. Former course prefix/number CMGT 1372.)
Blueprint reading covering the theory of projection, architectural and engineering symbols, relationship of views, and measuring with emphasis on commercial and industrial construction. (3 Lec.) (2 Lec., 3 Lab.)
CNBT 1311 Construction Methods And Materials (3)
(This is a WECM course number. Former course prefix/number CMGT 1370.)
An introduction to construction materials and methods and their applications. Laboratory fee. (2 Lec., 2 Lab.)

CNBT 1342 Building Codes And Inspections (3)
(This is a WECM course number. Former course prefix/number CMGT 2372.)
An examination of the building codes and standards applicable to building construction and inspection processes. (3 Lec.)

CNBT 1346 Construction Estimating I (3)
(This is a WECM course number. Former course prefix/number CMGT 2378.)
Fundamentals of estimating materials and labor costs in construction. Laboratory fee. (2 Lec., 2 Lab.)

CNBT 1391 Special Topics In Construction/Building Technology/Technician (3)
(This is a WECM course number. Former course prefix/number CMGT 1371.)
This course continues the study of construction materials, methods, and equipment using the Construction Specifications Institute (CSI) Masterformat. Topics covered include finishes, specialties, equipment, furnishing, special construction with an introduction to conveying, mechanical, electrical systems. Laboratory fee. (2 Lec., 2 Lab.)

CNBT 1392 Special Topics In Construction/Building Technology/Technician (3)
(This is a WECM course number. Former course prefix/number CMGT 2373.)
This course will concentrate on the organization and preparation of written construction documents. Emphasis will be placed on further developing concepts covered in Principles of Purchasing (BMGT 1313), as well as studying the development and application of master specifications, preliminary project descriptions, outline specifications, and both full, and abbreviated construction documents. Computer applications and automated editing procedures will also be demonstrated and applied. (3 Lec.)

CNBT 1393 Special Topics In Construction/Building Technology/Technician (3)
(This is a WECM course number. Former course prefix/number CMGT 2381.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 2 Lab.)

CNBT 2332 Project Scheduling (3)
(This is a WECM course number. Former course prefix/number CMGT 2377.)
A study of conventional scheduling using critical-path-method; precedence and arrow networks; gnatt charts; monthly reports; and crashing time schedule. Laboratory fee. (2 Lec., 2 Lab.)

CNBT 2342 Construction Management I (3)
(This is a WECM course number. Former course prefix/number CMGT 1375.)
Human relations management skills in motivation on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making. Laboratory fee. (2 Lec., 3 Lab.)

CNBT 2344 Construction Management II (3)
(This is a WECM course number. Former course prefix/number CMGT 2380.)
A management course in contract documents, safety, planning, scheduling, production control, and law and labor. Topics include contracts, planning, cost and production peripheral documents, and cost and work analysis. Laboratory fee. (2 Lec., 3 Lab.)

CNBT 2380 Cooperative Education - Construction/Building Technology/Technician (3)
(This is a WECM course number. Former course prefix/number CMGT 7371.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

DFTG 2352 Mechanical And Electrical Systems (3)
(This is a WECM course number.)
The properties of building materials (assemblies), specifications, codes, vendor references and uses of mechanical, plumbing, conveying, and electrical systems as related to architecture for residential and commercial construction. Laboratory fee. (2 Lec., 2 Lab.)

ENTC 1343 Statics (3)
(This is a WECM course number. Former course prefix/number ENGR 2270.)
A study of the composition and resolution of forces and the equilibrium of forces acting on structures. Includes the concepts of friction, moments, couples, centroids, and moment of inertia. Laboratory fee. (2 Lec., 2 Lab.)
ENTC 2333 Strength Of Materials (3)
(This is a WECM course number. Former course prefix/number ENGR 2270.)
A study of the relationships between loads and mechanical properties as they apply to materials, shape, and size of structural components and the resultant stress and strain in loaded components. Laboratory fee. (2 Lec., 2 Lab.)

OSHT 1313 Accident Prevention, Inspection, And Investigation (3)
(This is a WECM course number. Former course prefix/number CMGT 2371.)
Principles and practices providing a basis for understanding the nature of occupational hazard recognition, accident prevention, loss reduction, inspection techniques, and accident investigation analysis. (3 Lec.)

QCTC 1446 Testing And Inspection Systems (4)
(This is a WECM course number. Former course prefix/number CMGT 2379.)
A study of testing and inspection systems including pertinent specifications, inspection tools, gauges, instruments, and mechanisms used in illustrating the need for maintaining quality to establish standards. Laboratory fee. (3 Lec., 2 Lab.)

SRVY 1301 Introduction To Surveying (3)
(This is a WECM course number. Former course prefix/number CMGT 1374.)
An overview of the surveying profession. The history of surveying and its impact on the world. Review of the mathematics used in surveying. Introduction to basic surveying equipment with emphasis on measurements. Instruction on surveying procedures and the limitation of errors. Calculation to determine precision and error of closure. Laboratory fee. (2 Lec., 3 Lab.)

SRVY 1309 Surveying Measurement Practice (3)
(This is a WECM course number. Former course prefix/number CMGT 1376.)
An introductory lab course covering the equipment and hardware of the profession necessary to measure horizontal and vertical distances, in accordance with prevailing and applicable professional standards, e.g. standards of the National Geodetic Survey, state and local statutes and regulations, professional standards, such as the Texas Society of Professional Surveyors. Laboratory fee. (2 Lec., 3 Lab.)

CONSTRUCTION TECHNOLOGY

ARCT 1302 Architectural Materials and Methods of Construction (3)
(This is a WECM course number. Former course prefix/number CNST 1370.)
Properties, specifications, vendor references, and uses of materials as related to architectural systems of structures. Lab required. (3 Lec.)

CBFM 2311 Building Maintenance II (3)
(This is a WECM course number.)
A continuation of Building Maintenance I with emphasis on the operational aspects of maintaining and repairing facilities. Lab required. (2 Lec., 3 Lab.)

CBFM 2317 Mechanical Maintenance (3)
(This is a WECM course number.)
Study of the general principles of mechanical and electrical systems as related to inspection, repair, and preventive maintenance of facility equipment. Lab required. (2 Lec., 3 Lab.)

CNBT 1170 Basic Construction Safety (1)
(This is a local need course number. Former course prefix/number CNST 1170.)
This course covers basic job site construction safety in commercial and industrial construction. The OSHA 10 safety course outline is followed along with a study of hazardous materials on the job site. Lab required. (1 Lec.)

CNBT 1305 Residential and Light Commercial Blueprint Reading (3)
(This course is a WECM course number. Former course prefix/number CNST 1372.)
Blueprint reading covering the theory of projection, architectural and engineering symbols, relationship of views, and measuring with emphasis on residential and light commercial construction. Lab required. (3 Lec.)

CNBT 1321 Job Site Layout and Development (3)
(This is a WECM course number. Former course prefix/number CNST 1171.)
Study of the general principles of job site layout and development used by heavy equipment operators in the construction industry. Topics include plan reading, survey techniques, external considerations, and trade conventions. Lab required. (2 Lec., 3 Lab.)
This course overviews the duties and responsibilities of a field engineering for commercial and industrial building construction. The use of surveying equipment, sketches and proper field notes taking, methods of staking and layout of building site, locating center lines of piers and installation of batter boards. Lab required. (2 Lec., 3 Lab.)

CNBT 1449 Concrete-Commercial and Industrial (4)
(This is a WECM course number. Former course prefix/number CNST 2372.)
In depth coverage of the various techniques used in concrete utilization in commercial and industrial construction. Lab required. (2 Lec., 3 Lab.)

CNBT 2342 Construction Management I (3)
(This is a WECM course number. Former course prefix/number CNST 2378)
Human relations management skills in motivation on the job site. Topics include written and oral communications, leadership and motivation, problem solving, and decision making. (2 Lec., 3 Lab.)

CNBT 2346 Construction Management III (3)
(This is a WECM course number. Former course prefix/number CNST 2380)
An advanced course in construction safety, project management, scheduling, material handling, layout, payment scheduling, and inspections. Lab required. (2 Lec., 3 Lab.)

CNBT 2375 Field Engineering II (3)
(This is a WECM course number.)
This course continues the study of field engineering for commercial and industrial building construction. Methods used in estimating materials, development of Quantity logs and pier logs, use of blueprints and field notes, parking lots, retaining systems and basic curves. Lab required. (2 Lec., 3 Lab.)

CNBT 2377 Building and Contracting (3)
(This is a local need course number. Former course prefix/number CNST 2373.)
This course covers the basic process of organizing and operating a building or contracting business. Topics covered include establishing goals, organization, directing, staffing, coordinating and controlling, and budgeting. Lab required to operate and make a profit in a construction business. Lab required. (3 Lec.)

CNBT 2378 Estimating Commercial Mechanical Construction (3)
(This is a local need course number.)
This course covers the process of estimating electrical requirements for the construction of buildings. This course will use the CSI division 16 Electrical as the basis for instruction. The course will expose the individual to an environment similar to an estimating department of a commercial electrical contractor. (2 Lec., 2 Lab.)

CNBT 2379 Estimating Commercial Mechanical Construction (3)
(This is a local need course number.)
This course covers the process of estimating electrical requirements for the construction of buildings. This course will use the CSI division 15 Electrical as the basis for instruction. The course will expose the individual to an environment similar to an estimating department of a commercial electrical contractor. (2 Lec., 2 Lab.)

CNSE 1321 Job Site Layout and Development (3)
(This is a WECM course number. Former course prefix/number CNST 1171.)
Study of the general principles of job site layout and development used by heavy equipment operators in the construction industry. Topics include plan reading, survey techniques, external considerations, and trade conventions. Lab required. (2 Lec., 3 Lab.)

CRPT 1311 Conventional Roof Systems (3)
(This is a WECM course number.)
Study of the principles of design and construction of a conventional roof system incorporating gable, hip, and intersections. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1315 Conventional Wall Systems (3)
(This is a WECM course number. Former course prefix/number CNST 1183.)
Instruction in conventional wall systems with emphasis on wood frame construction. Topics include identification of components; construction of a wall system; safe work practices; and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1319 Engineered Roof Systems (3)
(This is a WECM course number. Former course prefix/number CNST 1175.)
Skill development in the identification and erection of engineered roof systems and components. Topics include trussed, timber-framed and steel-component roof structures with emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)
CRPT 1325 Forms and Foundations I (3)  
(This Is a WECM course number. Former course prefix/number CNST 1375.)  
Instruction in the construction of basic form and foundation systems including related safety, tools, equipment, and building layout. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1329 Introduction to Carpentry (3)  
(This Is a WECM course number.)  
An introduction to the carpentry trade including safety, tools, equipment, terminology, and methods. Lab required (2 Lec., 3 Lab.)

CRPT 1341 Conventional Exterior Finish Systems (3)  
(This Is a WECM course number. Former course prefix/number CNST 2376.)  
Skill development in the installation of exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1345 Conventional Interior Finish Systems (3)  
(This Is a WECM course number. Former course prefix/number CNST 1376.)  
Instruction in the installation of interior finish systems and components including the placement and installation of doors and trim and floor, wall, and ceiling finishes. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 1349 Forms and Foundations II (3)  
(This Is a WECM course number. Former course prefix/number CNST 2375.)  
Skill development in the construction of advanced forms and foundation systems including related safety, tools, equipment, and building layout. Advanced forms and foundation systems may include patented and engineered form systems. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2331 Advanced Roof Systems (3)  
(This Is a WECM course number. Former course prefix/number CNST 2174.)  
Skill development in the layout and construction of advanced architectural roof styles and features including the construction of multi-pitched roofs, dormers, chutes, cupolas, and other roof structures. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2339 Specialty Exterior Finish Systems (3)  
(This Is a WECM course number.)  
Skill development in the installation of specialty exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2341 Specialty Interior Finish Systems (3)  
(This Is a WECM course number. Former course prefix/number CNST 2377.)  
Skill development in the installation of specialty interior finish systems and components including specialty floor, wall, and ceiling finishes. Emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2343 Specialty Wall Systems (3)  
(This Is a WECM course number. Former course prefix/number CNST 2177.)  
Instruction in wall systems with emphasis on metal frame construction. Topics include the identification of components and the construction of a wall system with emphasis on safe work practices and the selection, use, and maintenance of tools and equipment. Lab required. (2 Lec., 3 Lab.)

CRPT 2347 Stairs (3)  
(This Is a WECM course number. Former course prefix/number CNST 2179.)  
Instruction in the construction and installation of stairs. Topics include stair types and parts, wood and metal stairs, and the layout and installation of job and factory built stairs. Lab required. (2 Lec., 3 Lab.)

ELPT 1311 Basic Electrical Theory (3)  
(This Is a WECM course number.)  
An overview of the theory and practice of electrical circuits including calculations as applied to alternating and direct current. Laboratory required. (2 Lec., 3 Lab.)

ELPT 1319 Fundamentals of Electricity I (3)  
(This Is a WECM course number.)  
An introduction to basic direct current (DC) theory including electron theory and direct current applications. Lab required. (2 Lec., 3 Lab.)

ELPT 1320 Fundamentals of Electricity II (3)  
(This Is a WECM course number.)  
An introduction to alternating current (AC) including Ohm's Law. Topics include AC voltage, frequency, mechanical and electrical degrees, waveforms, resistors, capacitors, and inductors. Lab required. (2 Lec., 3 Lab.)
ELPT 1321 Introduction to Electrical Safety and Tools (3)
(This is a WECM course number.)
A comprehensive overview of safety rules and regulations and the selection, inspection, use, and maintenance of common tools for electricians. Lab required. (2 Lec., 3 Lab.)

ELPT 1345 Commercial Wiring (3)
(This is a WECM course number.)
Instruction in commercial wiring methods. Lab required. (2 Lec., 3 Lab.)

ELPT 1357 Industrial Wiring (3)
(This is a WECM course number.)
Instruction in wiring methods used for industrial installations. Lab required. (2 Lec., 3 Lab.)

ELTN 1341 Basic Motor Controls (3)
(This is a WECM course number.)
Instruction in motor control fundamentals and control wiring in accordance with the National Electrical Code (NEC). Skill development in troubleshooting, maintenance, and repair of various control circuits. Lab required. (2 Lec., 3 Lab.)

ELTN 1343 Electrical Troubleshooting (3)
(This is a WECM course number.)
Instruction in the maintenance, theory of operation, troubleshooting, and repair of circuits of various residential, commercial, and industrial electrical systems. Lab required. (2 Lec., 3 Lab.)

GLZG 1370 Glazing I (3)
(This is a local need course number.)
A comprehensive overview of math and safety related to glazing, the proper use of glazing tools and equipment, types of glass used in modern buildings, and related materials used in glazing. Lab required. (2 Lec., 3 Lab.)

GLZG 1371 Glazing II (3)
(This is a local need course number.)
This course covers basic calculating, layout, and cutting of glass, the fabrication of mirrors and glass products, types of plastics and panels, basic introduction to Aluminum fabrication and Store Front installation. Lab required. (2 Lec., 3 Lab.)

GLZG 1372 Glazing III (3)
(This is a local need course number.)
This course studies the use of the Safety Glazing Code, contract documents, basic types and methods of installing sealant used in glazing, introduction to types and uses of insulating glass, installation of custom mirrors and methods used in re-glazing. Lab required. (2 Lec., 3 Lab.)

GLZG 2370 Glazing IV (3)
(This is a local need course number.)
This course covers types and components of windows, advanced glass fabrication methods and installation, aluminum fabrication of entrances, and related types of entrance frames and hardware used, types and installation of tubes and shower enclosures. Lab required. (2 Lec., 3 Lab.)

GLZG 2371 Glazing V (3)
(This is a local need course number.)
The course covers use of blueprints and shop drawings used in glazing, methods of sketching, taking measurements, and basic takeoffs process, types and uses mechanical fasteners, and basic rigging and hoisting of glazing materials and construction of work platforms on the job. Lab required. (2 Lec., 3 Lab.)

GLZG 2372 Glazing VI (3)
(This is a local need course number.)
This course covers types and methods of installing skylights, sloped glazing, metal curtain walls, types and uses of finishes and coatings for aluminum and glass and trouble shooting entrances and hardware. Lab required. (2 Lec., 3 Lab.)

HART 1374 Refrigeration Principles (3)
(This is a local need course number.)
An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components. Lab required. (2 Lec., 3 Lab.)

HART 1376 A/C Control Principles (3)
(This is a local need course number.)
A basic study of electrical, pressure, and temperature controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohm's law as applied to A/C controls and circuits. Lab required. (2 Lec., 3 Lab.)

HART 2376 Troubleshooting (3)
(This is a local need course number.)
An advance course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance test. Lab required. (2 Lec., 3 Lab.)

HART 2377 Commercial Air Conditioning (3)
(This is a local need course number.)
A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. Lab required. (2 Lec., 3 Lab.)
HART 2378 Air Conditioning Systems Design (3)
(This is a local need course number.)
A study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Lab required. (2 Lec., 3 Lab.)

MBST 1407 Masonry I (4)
(This is a WECM course number.)
Introduction to masonry including safety, tools and equipment, masonry materials, theory, terminology, federal and state guidelines, building plans, mortar mixing and spreading, and the fundamentals of laying bricks and block. Lab required. (3 Lec., 2 Lab.)

MBST 1409 Masonry II (4)
(This is a WECM course number.)
A continuation of Masonry I with emphasis on hands-on applications of masonry concepts and theories Lab required. (3 Lec., 2 Lab.)

MBST 2407 Masonry III (4)
(This is a WECM course number.)
Development of the ability to lay brick or blocks to the line, straight leads, build corners, and construct piers including blueprints, symbols, abbreviations, and sealing systems. Lab required. (3 Lec., 2 Lab.)

MBST 2409 Masonry IV (4)
(This is a WECM course number.)
A continuation of Intermediate Masonry I including practical applications of masonry concepts and skills using plain and reinforced mortars. Lab required. (3 Lec., 2 Lab.)

MBST 2447 Masonry V (4)
(This is a WECM course number.)
Instruction in the theory and application of special masonry construction, including material and labor estimations, costs estimating, bond patterns, fireplaces, arches and lintels, tying into walls, and laying of masonry materials. Lab required. (3 Lec., 2 Lab.)

MCHN 1301 Sheet Metal I (3)
(This is a WECM course number.)
An introduction to the materials, tools, and techniques used in the sheet metal industry. Review of trade math problems involving measurement of lines, area, volume, weight, and geometric figures. Introduction of types and uses of hand, layout, and cutting tools along with bending and forming machines. Practice of material types and properties along with the principles of layout and metal forming. Lab required. (2 Lec., 3 Lab.)

MCHN 1349 Sheet Metal II (3)
(This is a WECM course number.)
An introduction to various types of pipe and fittings. Emphasis on principles and type of fittings for radial line development are discussed and factors that influence bend allowances and calculations necessary for determining proper bend allowances. Introduction to principles of soldering roof flashings, gutters, downspouts, and sheet metal duct fabrications. Lab required. (2 Lec., 3 Lab.)

MCHN 1370 Sheet Metal IV (3)
(This is a local need course number.)
This course covers math, insulating materials and methods of installation, layout by the triangulation method, basic piping practices, rigging and hosting. Lab required. (2 Lec., 3 Lab.)

MCHN 1371 Sheet Metal V (3)
(This is a local need course number.)
The course covers sheet metal duct fabrication standards, gutters and downspouts, hoods and ventilators, and flashing walls and roofs. Lab required. (2 Lec., 3 Lab.)

MCHN 1372 Sheet Metal VI (3)
(This is a local need course number.)
The course covers principles of air flow for HVAC systems, fiber glass and PVC duct, and introduction to welding. Lab required. (2 Lec., 3 Lab.)

MCHN 2370 Sheet Metal VII (3)
(This is a local need course number.)
The course covers sheet metal fabrication, principles of airflow, introduction to brazing and oxyfuel cutting, field measuring and fitting, incorporating blueprints and specifications. Lab required. (2 Lec., 3 Lab.)

MCHN 2371 Sheet Metal VIII (3)
(This is a local need course number.)
The course studies shop production and organization, air balance, and advanced sheet metal fabrication. Lab required. (2 Lec., 3 Lab.)

MCHN 2372 Sheet Metal IX (3)
(This is a local need course number.)
A comprehensive review of louvers, dampers, access doors, hoods and ventilators, and fume and exhaust system design. Lab required. (2 Lec., 3 Lab.)

PFPB 1308 Introduction to Pipefitting (3)
(This is a WECM course number.)
An introduction to the craft including mathematical operations applicable to pipefitting, hand tools, safety practices, and material communication. Lab required. (2 Lec., 3 Lab.)
PFPB 1313 Introduction to the Plumbing Trade (3)
(This is a WECM course number.)
An introduction to the plumbing craft including mathematical operations applicable to the plumbing trade, hand tools, safety practices, and material identification. Lab required. (2 Lec., 3 Lab.)

PFPB 1345 Commercial Construction and Fixture Setting (3)
(This is a WECM course number.)
Instruction in the use of practices and procedures employed by a plumber in the common construction of a commercial building including multilevel drain waste vent systems, water systems, and fixture installation. Lab required. (2 Lec., 3 Lab.)

PFPB 1370 Commercial Plumbing I (3)
(This is a local need course number.)
This course covers the skills in the procedures and techniques employed in the installation of DWV systems, water supply systems in commercial buildings. Lab required. (2 Lec., 3 Lab.)

PFPB 1371 Commercial Plumbing II (3)
(This is a local need course number.)
This course continues the study commercial plumbing started in commercial plumbing I with proper methods used in the layout and installation of DWV systems, Water Heating Systems and miscellaneous piping commonly found in commercial buildings. Lab required. (2 Lec., 3 Lab.)

PFPB 2301 Pipe Fabrication and Installation I (3)
(This is a WECM course number.)
Skill development in pipe fabrication and pipe supports. Lab required. (2 Lec., 3 Lab.)

PFPB 2341 Pipe Fabrication and Installation I (3)
(This is a WECM course number.)
In-depth instruction in advanced pipe fabrication procedures including pipe template development. Lab required. (2 Lec., 3 Lab.)

PFPB 2343 Pipe Practices (3)
(This is a WECM course number.)
An advanced course in testing; steam traps; valve maintenance; and the identification, storage, and handling of inline specialties. Lab required. (2 Lec., 3 Lab.)

PFPB 2347 Plumbing and Pipefitting Equipment and Safety (3)
(This is a WECM course number.)
Instruction in the safe use of construction equipment used in the process of the plumbing and pipefitting trades. Lab required. (2 Lec., 3 Lab.)

PFPB 2370 Industrial Plumbing (3)
(This is a local need course number.)
This covers layout and installation of plumbing systems in industrial construction, which includes water treatment, power plants and manufacturing plants. Lab required. (2 Lec., 3 Lab.)

SPFT 1371 Sprinkler Fitter I (3)
(This is a local need course number.)
Introduction to the trade, safety and math for sprinkler fitters, tools and equipment, hanger supports, restraint and guides, measuring and threading steel pipe, types and uses of flanged grooved and plain end fittings. Lab required. (2 Lec., 3 Lab.)

SPFT 1372 Sprinkler Fitter II (3)
(This is a local need course number.)
This course covers the types and uses of plastic pipe, copper tubing, in fire sprinkler systems, underground pipe, discusses soils in sprinkler fitting work, proper handling and storage and installation of underground piping. Lab required. (2 Lec., 3 Lab.)

SPFT 1373 Sprinkler Fitter III (3)
(This is a local need course number.)
This course covers an introduction to types and components of sprinklers systems, types and methods used to install standard sprinklers and special sprinklers, types and methods for installation of nozzles, types of general-purpose valves. Lab required. (2 Lec., 3 Lab.)

SPFT 1374 Sprinkler Fitter IV (3)
(This is a local need course number.)
This course covers the proper safety, tools and equipment necessary when installing wet and dry-pipe fire systems, the function and operation of wet and dry-pipe fire systems also studies the components and methods of installing a wet and dry-pipe fire systems. Lab required. (2 Lec., 3 Lab.)

SPFT 2370 Sprinkler Fitter V (3)
(This is a local need course number.)
This course covers the use of construction blueprints and math in sprinkler fitting, necessary tools and equipment, the study of water and types of water storage and water supplies. Lab required. (2 Lec., 3 Lab.)

SPFT 2371 Sprinkler Fitter VI (3)
(This is a local need course number.)
This course covers the materials, methods used to install wet and dry standpipes fire systems, building construction and related building codes, types of preaction/deluge systems, and methods used in troubleshooting wet and dry standpipe systems. Lab required. (2 Lec., 3 Lab.)
SPFT 2372 Sprinkler Fitter VII (3)
(This is a local need course number.)
This course covers types and methods of installation of
fire pumps, special extinguishing systems, testing,
maintenance and troubleshooting of fire pumps,
developing a maintenance checklist for fire system
equipment. Lab required. (2 Lec., 3 Lab.)

SPFT 2373 Sprinkler Fitter VIII (3)
(This is a local need course number.)
This course covers design, inspection and maintenance
of fire systems, principles of hydraulics in fire systems,
and introduction to the role and responsibilities of a
supervisor. Lab required. (2 Lec., 3 Lab.)

SRVY 1309 Surveying Measurement Practice (3)
(This is a WECM course number. Former course prefix/number
CNST 2378.)
An introductory lab course covering the equipment and
hardware of the profession necessary to measure
horizontal and vertical distances, in accordance with
prevailing and applicable professional standards, e.g.,
standards of the National Geodetic Survey, state and
local statutes and regulations, professional standards,
such as the Texas Society of Professional Surveyors. (2
Lec., 3 Lab.)

SRVY 1313 Plane Surveying (3)
(This is a WECM course number.)
An introductory overview of surveying equipment and
measurement techniques used in mapping. Emphasis on
leveling and traversing for preparing a map. Lab
required. (2 Lec., 3 Lab.)

SRVY 1315 Surveying Calculations I (3)
(This is a WECM course number.)
An introduction to the mathematics used in surveying
and mapping, e.g., algebra, plane trigonometry, and
plane, solid, and analytical geometry. Lab required. (3
Lec.)

WDWK 1115 Trim and Millwork (1)
(This is a WECM course number. Former course prefix/number
CNST 1178.)
Topics include millwork, molding, and specialty trim work
and floor covering. Other topics include job planning,
blueprints and specifications for use in determining
material requirements. Lab required. (2 Lab.)

WDWK 1313 Cabinet Making (3)
(This is a WECM course number. Former course prefix/number
CNST 1377.)
Includes the design and construction of base cabinets
and wall cabinets for kitchen equipment and processes,
basic welding gases, fluxes, rods, electrodes, symbols,
and blueprints. Lab required. (2 Lec., 3 Lab.)

WDWK 2451 Cabinet Making II (4)
(This is a WECM course number.)
Advanced skills in machine woodworking and hand
craftsmanship. Emphasizes advanced design and door
and drawer construction, laminate laying, and customer
and co-workers relations. Lab required. (3 Lec., 2 Lab.)

WLDG 1217 Introduction to Layout and
Fabrication (2)
(This is a WECM course number.)
A fundamental course in layout and fabrication related to
the welding industry. Major emphasis on structural
shapes and use in construction. Lab required. (1 Lec.,
4 Lab.)

WLDG 1234 Introduction to Gas Tungsten Arc
(GTAW) Welding (2)
(This is a WECM course number.)
An introduction to the principles of gas tungsten arc
welding (GTA), setup/use of GTAW equipment, and safe
use of tools and equipment. Welding instruction in
various positions on joint designs. Lab required. (1 Lec.,
4 Lab.)

WLDG 1257 Intermediate Shielded Metal Arc (SMAW)
Welding (2)
(This is a WECM course number.)
A study of the production of various fillets and groove
welds. Preparation of specimens for testing in all test
positions. Lab required. (1 Lec., 4 Lab.)

WLDG 1307 Basic Welding Processes (3)
(This is a WECM course number.)
An overview of the basic welding processes, including
oxy-fuel welding and cutting, shielded metal arc
(SMAW), gas metal arc (GMAW), and gas tungsten arc
welding (GTAW). Lab required. (2 Lec., 3 Lab.)

WLDG 1323 Welding Safety, Tools, and
Equipment (3)
(This is a WECM course number.)
An introduction to welding careers and safety practice,
including welding safety; OSHA and the Hazardous
Communication Act; Material Safety Data Sheets
(MSDS); basic mathematics; measuring systems; shop
operations; use and care of precision measuring tools;
and the use and care of hand and power tools.
Instruction on various types of welding equipment and
processes, basic welding gases, fluxes, rods, electrodes,
symbols, and blueprints. Lab required. (2 Lec., 3 Lab.)
WLDG 1435 Introduction to Pipe Welding (4)
(This is a WECM course number.)
An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes. Lab required. (3 Lec., 2 Lab.)

WLDG 2206 Intermediate Pipe Welding (2)
(This is a WECM course number.)
A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds will be 1G, 2G, 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices. Lab required. (1 Lec., 4 Lab.)

WLDG 2213 Welding Using Multiple Processes (2)
(This is a WECM course number.)
Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. Lab required. (1 Lec., 4 Lab.)

WLDG 2214 Welding Using Multiple Processes (2)
(This is a WECM course number.)
Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. Lab required. (1 Lec., 4 Lab.)

CRIMINAL JUSTICE

CRIJ 1301 Introduction To Criminal Justice (3)
(This is a common course number. Former course prefix/number CJ 140.)
This course is a study of history and philosophy of criminal justice including ethical considerations. Topics include the definition of crime, the nature and impact of crime, an overview of the criminal justice system, law enforcement, court system, prosecution and defense, trial process and corrections. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045142)

CRIJ 1306 The Courts and Criminal Justice (3)
(This is a common course number. Former course prefix/number CJ 132.)
The judiciary in the criminal justice system is explained. The structure of the American court system is defined. Prosecutional right to counsel is explained. Other areas covered are pretrial release, grand juries, adjudication process and types and rules of evidence, and sentencing. (3 Lec.)
(Coordinating Board Academic Approval Number 2201015442)

CRIJ 1307 Crime In America (3)
(This is a common course number. Former course prefix/number CJ 139.)
American crime problems are studied in the historical perspective. Social and public policy factors affecting crime are discussed. The impact of crime and crime trends are shown along with the social characteristics of specific crimes. The prevention of crime is emphasized. (3 Lec.)
(Coordinating Board Academic Approval Number 4504015242)

CRIJ 1310 Fundamentals Of Criminal Law (3)
(This is a common course number. Former course prefix/number CJ 130.)
A study of the nature of criminal law is presented. The philosophical and historical development of criminal law is covered. Major definitions and concepts are given. The classification of crime is covered. The elements of crimes and penalties are discussed using Texas statutes as illustrations. Criminal responsibility is defined. (3 Lec.)
(Coordinating Board Academic Approval Number 2201015342)

CRIJ 1313 Juvenile Justice System (3)
(This is a WECM course number. Former course prefix/number CJ 2322.)
A study of the juvenile justice process. Topics include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045242)

CRIJ 2301 Community Resources In Corrections (3)
(This is a WECM course number. Former course prefix/number CJ 2301.)
An overview of diversionary practices and treatment programs available to offenders in a local context. Topics include selected recognized models and future trends in community treatment. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045342)
CRIJ 2313 Correctional Systems and Practices (3)
(This is a WECM course number. Former course prefix/number CRIJ 2313.)
A study of the role of corrections in the criminal justice system. Topics include organization and theory of correctional systems, institutional operations, management, alternatives to institutionalization, treatments and rehabilitation, and current and future issues. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045442)

CRIJ 2314 Criminal Investigation (3)
(This is a WECM course number. Former course prefix/number CRIJ 2314.)
Study of investigative theory, the collection and preservation of evidence, sources of information, concepts of interviewing and interrogation, the use of forensic sciences, and trial preparation. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045542)

CRIJ 2323 Legal Aspects of Law Enforcement (3)
(This is a WECM course number. Former course prefix/number CRIJ 2323.)
This course covers police authority, responsibilities, and constitutional constraints. Topics include laws of arrest, search and seizure, and police liability. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045642)

CRIJ 2328 Police System and Practices (3)
(This is a WECM course number. Former course prefix/number CRIJ 2328.)
Exploration of the profession of police officer. Topics include organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues. (3 Lec.)
(Coordinating Board Academic Approval Number 4301045742)

CJLE 2420 Texas Peace Officer Procedures (4)
(This is a WECM course number. Former course prefix/number CRIJ 2334.)
Prerequisite: None. This course is a study of the techniques and procedures used by police officers on patrol. Includes controlled substance identification, handling abnormal persons, traffic collision investigation, note taking and report writing, vehicle operation, traffic direction, crowd control, and jail operations. Laboratory fee. (3 Lec., 4 Lab.)

CJLE 2421 Texas Peace Officer Law (4)
(This is a WECM course number. Former course prefix/number CRIJ 2333.)
Prerequisite: None. This course is a study of laws that are directly related to police field work. Topics include traffic, intoxicated driver, Penal Code, elements of crimes, the Family Code, Alcoholic Beverage Code, and civil liability. Laboratory fee. (3 Lec., 4 Lab.)

CJLE 2522 Texas Peace Officer Skills (5)
(This is a WECM course number. Former course prefix/number CRIJ 2335.)
Prerequisite: None. This course includes the demonstration and practice of the skills expected of a police officer. Topics include patrol, traffic stops, use of force, mechanics of arrest, firearms safety and emergency medical care. Laboratory fee. (4 Lec., 4 Lab.)

CJSA 1382 Cooperative Education - Criminal Justice Studies (3)
(This is a WECM course number. Former course prefix/number CRIJ 7371.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

CJSA 1482 Cooperative Education - Criminal Justice Studies (4)
(This is a WECM course number. Former course prefix/number CRIJ 7471.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

CJSA 2382 Cooperative Education - Criminal Justice Studies (3)
(This is a WECM course number. Former course prefix/number CRIJ 7372.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)
CJSA 2482 Cooperative Education - Criminal Justice Studies (4)
(This is a WECM course number. Former course prefix/number CRIJ 7472.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a specific discipline, specific learning objectives guide the student through the paid work experience. The course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

FIRT 1303 Fire And Arson Investigation I (3)
(This is a WECM course number.)
In-depth study of basic fire and arson investigation practices. Emphasis on fire behavior principles related to fire cause and origin determination. (3 Lec.)

CULTURAL STUDIES

CULT 2370 Cultural Studies (3)
Prerequisite: ENGL 1302. This interdisciplinary and cross-cultural course studies human thought and relationships by considering a significant theme. Themes may vary each semester. The course promotes ethical and critical reasoning. (3 Lec.)
(Coordinating Board Academic Approval Number 2401037235)

DANCE

DANC 1101 Composition I (1)
(This is a common course number. Former course prefix/number DAN 234)
Prerequisite: Demonstrated competence approved by the instructor. Development of basic principles and theories involved in composition are studied. Emphasis is placed on movement principles, group and structural forms. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015530)

DANC 1102 Composition II (1)
(This is a common course number. Former course prefix/number DAN 235)
Prerequisites: Dance 1101 and demonstrated competence approved by the instructor. This course is a continuation of Dance 1101. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015530)

DANC 1110 Tap I (1)
(This is a common course number. Former course prefix/number DAN 157)
This course explores basic tap techniques. Emphasis on technique development and familiarity with traditional tap rhythms and steps. Laboratory fee. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601145130)

DANC 1111 Tap II (1)
(This is a common course number. Former course prefix/number DAN 158)
Prerequisite: Dance 1110 or demonstrated competence approved by instructor. This course continues and further develops an exploration of Dance 1110 Laboratory fee. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601145130)

DANC 1112 Coaching and Repertoire (1)
(This is a common course number. Former course prefix/number DAN 252)
Prerequisite: Demonstrated competence approved by the instructor. Variations (male and female) and pas de deux from standard ballet repertoire are studied and notated. The dancer is given individual coaching, with special attention given to the correction of problems. This course may be repeated for credit. Laboratory fee. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1113 Improvisation (1)
(This is a common course number. Former course prefix/number DAN 253)
Prerequisite: Dance 1248 or Dance 1342. This course consists of creative problem-solving utilizing basic elements of design. This course may be repeated for credit. Laboratory fee. (2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1151 Rehearsal and Performance I (1)
(This is a common course number. Former course prefix/number DAN 116)
This course supplements beginning dance technique classes. Basic concepts of approaching work on the concert stage--stage directions, stage areas, and the craft involved in rehearsing and performing are emphasized. This course may be repeated for credit. (4 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1152 Rehearsal and Performance II (1)
(This is a common course number. Former course prefix/number DAN 200)
Prerequisite: Dance 1151 or demonstrated competence approved by the instructor. This course supplements intermediate dance technique classes. It is a continuation of Dance 1151 with emphasis on more advanced concepts as they apply to actual rehearsals and performances. This course may be repeated for credit. (4 Lab.)
(Coordinating Board Academic Approval Number 5003015230)
DANC 1170 Hip Hop I (1)
(This is a common course number. Former course prefix/number DAN 167)
This course explores basic hip hop techniques. Emphasis is on technique development and familiarity with contemporary meters and rhythms. Laboratory fee. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601145130)

DANC 1171 Hip Hop II (1)
(This is a common course number. Former course prefix/number DAN 168)
Prerequisite: Dance 1170 or demonstrated competence approved by instructor. This course continues and further develops an exploration of Dance 1170. Laboratory fee. (1 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 3601145130)

DANC 1247 Jazz I (2)
(This is a common course number. Former course prefix/number DAN 155)
The basic skills of jazz dance are introduced. Emphasis is on technique and development, rhythm awareness, jazz styles, and rhythmic combinations of movement. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1248 Jazz II (2)
(This is a common course number. Former course prefix/number DAN 156)
Prerequisite: Dance 1247 or demonstrated competence approved by the instructor. Work on skills and style in jazz dance is continued. Technical skills, combinations of steps and skills into dance patterns, and exploration of composition in jazz form are emphasized. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1341 Ballet I (3)
(This is a common course number. Former course prefix/number DAN 161)
This course explores basic ballet structure and terminology. Included are posture, balance, coordination, rhythm, and flow of physical energy through the art form. Instruction in beginning adagio, petit allegro, grand allegro, inside and outside turns and various jumps are studied. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1342 Ballet II (3)
(This is a common course number. Former course prefix/number DAN 163)
Prerequisite: Dance 1341. This course is a continuation of Dance 1341. Emphasis is on body directions and stamina. More complex combinations using advanced patterning will be studied. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1345 Modern I (3)
(This is a common course number. Former course prefix/number DAN 165)
This course explores basic modern techniques. Emphasis is on technique development, and familiarity with contemporary meters and rhythms. An awareness of major influences on concert dance is developed. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1346 Modern II (3)
(This is a common course number. Former course prefix/number DAN 166)
Prerequisite: Dance 1345. This course continues and further develops an exploration of Dance 1345. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1370 Beginning Dance Technique in Theatre (3)
(Former course prefix/number THE 112)
Basic movements of the dance are explored. Emphasis is on swing movements, circular motion, fall and recovery, contraction and release, and contrast of literal and abstract movements. Body balance, manipulation of trunk and limbs, and the rhythmic flow of physical energy are developed. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 1371 Intermediate Dance (3)
(Former course prefix/number THE 113)
Prerequisite: Dance 1370 or demonstrated competence approved by the instructor. Various aspects of dance are surveyed. Topics include the role of dance in total theatre, the evolution of dance styles, and the jazz style. Emphasis is on the flow of movement, body placement, dynamic intensity, level, focus, and direction. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2247 Jazz III (2)
(This is a common course number. Former course prefix/number DAN 255)
Prerequisite: Dance 1248. This course consists of the development of proper performance framing. Complex jazz rhythms, turns, jumps, and intricate elements of choreography are introduced. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2248 Jazz IV (2)
(This is a common course number. Former course prefix/number DAN 256)
Prerequisite: Dance 2247. This course is a further exploration of Dance 2247. This course may be repeated for credit. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)
DANC 2303 Dance Appreciation (3)
(This is a common course number. Former course prefix/number DAN 160)
The cultural, historical and aesthetic qualities of dance are presented through lectures, films, videos, demonstrations and dance productions. Primitive, classical and contemporary dance forms are included. (3 Lee.)
(Coordinating Board Academic Approval Number 5003015430)

DANC 2341 Ballet III (3)
(This is a common course number. Former course prefix/number DAN 258)
Prerequisite: Dance 1342. The development of ballet techniques is continued. More complicated exercises at the barre and center floor are included. Emphasis is on long series of movements, adagio and jumps. Precision of movement is stressed. Laboratory fee. (2 Lee., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2342 Ballet IV (3)
(This is a common course number. Former course prefix/number DAN 260)
Prerequisite: Dance 2341. Individual proficiency, artistry and technical virtuosity are developed. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2345 Modern III (3)
(This is a common course number. Former course prefix/number DAN 265)
Prerequisite: Dance 1346. This course consists of the development of complex falls, combinations, phrasing, and dramatic emphasis. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DANC 2346 Modern IV (3)
(This is a common course number. Former course prefix/number DAN 266)
Prerequisite: Dance 2345. This course is a further exploration of Dance 2345. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5003015230)

DEVELOPMENTAL COLLEGE
LEARNING SKILLS

DCLS 0100 College Learning Skills (1)
(Former course prefix/number CLS 100)
This course is for students who wish to extend their learning skills for academic or career programs. Individualized study and practice are provided in reading, study skills, and composition. This course may be repeated for a maximum of three credits. TASP remediation and/or preparation may be included. Students may enroll in up to three different sections of CLS during one semester. This course should not be used for TASP remediation. (1 Lec.)
(Coordinating Board Academic Approval Number 3201065135)

DEVELOPMENTAL
COMMUNICATIONS

DCOM 0095 Communication Skills (3)
(Former course prefix/number DC 095)
This course focuses on strengthening language communications. Topics include grammar, paragraph structure, reading skills, and oral communication. Emphasis is on individual testing and needs. This course should not be used for TASP remediation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085135)

DCOM 0120 Communication Skills (3)
(Former course prefix/number DC 120)
This course is for students with significant communication problems. It is organized around skill development, and students may enroll at any time (not just at the beginning of a semester) upon the referral of an instructor. Emphasis is on individual needs and personalized programs. Special attention is given to oral language. Contacts are made with other departments to provide other ways of learning for the students. This course should not be used for TASP remediation. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3201085135)

DEVELOPMENTAL LEARNING

DLEA 0094 Learning Skills Improvement (1)
(Former course prefix/number DL 094)
Learning skills are strengthened. Emphasis is on individual needs and personalized programs. This course may be repeated for a maximum of three credits. This course should not be used for TASP remediation. (2 Lab.)
(Coordinating Board Academic Approval Number 3201015235)
DEVELOPMENTAL MATHEMATICS

Developmental Mathematics courses offer a review of mathematical skills. Developmental Mathematics 0099 or Developmental Mathematics 0093 satisfies prerequisites for Mathematics 1314, 1324, 1332, 1333 1335, 1342 and 1414. Developmental Mathematics 0097 or Developmental Mathematics 0091 satisfies prerequisites for TECM 1341.

DMAT 0060 Basic Mathematics I (1)
(Former course prefix/number DM 060)
This course is designed to give an understanding of fundamental operations. Selected topics include whole numbers, decimals, and ratio and proportions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0061 Basic Mathematics II (1)
(Former course prefix/number DM 061)
This course is designed to give an understanding of fractions. Selected topics include primes, factors, least common multiples, percents, and basic operations with fractions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0062 Pre Business (1)
(Former course prefix/number DM 062)
This course is designed to introduce students to business mathematics. Selected topics include discounts and commissions, interest, metric and English measuring systems, areas, and volumes. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0063 Pre Algebra (1)
(Former course prefix/number DM 063)
This course is designed to introduce students to the language of algebra with such topics as integers, metrics, equations, and properties of counting numbers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0064 Mathematics For Nursing I (1)
(Former course prefix/number DM 064)
This course is designed to develop an understanding of the measurements and terminology in medicine and calculations involving conversions of applicable systems of measurement. It is designed primarily for students in all nursing programs. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0065 Mathematics For Nursing II (1)
(Former course prefix/number DM 065)
Prerequisite: Developmental Mathematics 0064. This course includes medical calculations used in problems dealing with solutions and dosages. It is designed primarily for students in the nursing programs. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0070 Elementary Algebra I (1)
(Former course prefix/number DM 070)
Prerequisites: Developmental Mathematics 0090, Developmental Mathematics 0063, or equivalent. This course is an introduction to algebra and includes selected topics such as basic principles and operations of sets, counting numbers, and integers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0071 Elementary Algebra II (1)
(Former course prefix/number DM 071)
Prerequisite: Developmental Mathematics 0070 or equivalent. This course includes selected topics such as rational numbers, algebraic polynomials, factoring, and algebraic fractions. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0072 Elementary Algebra III (1)
(Former course prefix/number DM 072)
Prerequisite: Developmental Mathematics 0071 or equivalent. This course includes selected topics such as fractional and quadratic equations, quadratic equations with irrational solutions, and systems of equations involving two variables. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0073 Introduction To Geometry (1)
(Former course prefix/number DM 073)
This course introduces principles of geometry. Axioms, theorems, axiom systems, models of such systems, and methods of proof are stressed. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0080 Intermediate Algebra I (1)
(Former course prefix/number DM 080)
Prerequisites: Developmental Mathematics 0072, Developmental Mathematics 0091 or equivalent. This course includes selected topics such as systems of rational numbers, real numbers, and complex numbers. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0081 Intermediate Algebra II (1)
(Former course prefix/number DM 081)
Prerequisite: Developmental Mathematics 0080 or equivalent. This course includes selected topics such as sets, relations, functions, inequalities, and absolute values. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0082 Intermediate Algebra III (1)
(Former course prefix/number DM 082)
Prerequisite: Developmental Mathematics 0081 or equivalent. This course includes selected topics such as graphing, exponents, and factoring. (1 Lec.)
(Coordinating Board Academic Approval Number 3201045137)
DMAT 0090 Pre Algebra Mathematics (3)  
(Former course prefix/number DM 090)  
Prerequisite: An appropriate assessment test score.  
This course is designed to develop an understanding of  
fundamental operations using whole numbers, fractions,  
decimals, and percentages and to strengthen basic skills  
in mathematics. The course is planned primarily for  
students who need to review basic mathematical  
processes. This is a first three-hour course in a  
developmental mathematics sequence. (3 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0091 Elementary Algebra (3)  
(Former course prefix/number DM 091)  
Prerequisite: Developmental Mathematics 0090 or an  
appropriate assessment test score. This is a course in  
introductory algebra which includes operations on real  
numbers, polynomials, special products and factoring,  
rational expressions, and linear equations and  
inequalities. Also covered are graphs, systems of linear  
equations, exponents, roots, radicals, and quadratic  
equations. (3 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0093 Intermediate Algebra (3)  
(Former course prefix/number DM 093)  
Prerequisite: One year of high school algebra and an  
appropriate assessment test score or Developmental  
Mathematics 0091. This course includes further  
development of the terminology of sets, operations on  
sets, properties of real numbers, polynomials, rational  
expressions, linear equations and inequalities, the  
straight line, systems of linear equations, exponents,  
roots, and radicals. Also covered are products and  
factoring, quadratic equations and inequalities, absolute  
value equations and inequalities, relations, functions,  
and graphs. (3 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0096 Essential Math (3)  
(Former course prefix/number DM 096)  
This course is designed primarily for students who need  
to review basic mathematical processes. Students will  
develop an understanding of fundamental operations  
using fractions, decimals, and percentages to strengthen  
basic skills in mathematics. This is a first course in a  
developmental mathematics sequence. (3 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0097 Algebra Fundamentals I (3)  
(Former course prefix/number DM 097)  
Prerequisite: Developmental Mathematics 0096 or 0090  
or an appropriate assessment test score. This is a  
course in introductory algebra which includes operations  
on real numbers, polynomials, special products and  
factoring, and linear equations. Also covered are  
graphs, systems of linear equations and simple  
exponents. (3 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0098 Algebra Fundamentals II (3)  
(Former course prefix/number DM 098)  
Prerequisite: One year of high school algebra and an  
appropriate assessment test score or Developmental  
Mathematics 0097 or Developmental Mathematics 0091.  
This course is a course in introductory algebra which  
includes rational expressions, inequalities and quadratic  
equations. Also included are properties of real numbers,  
the straight line, absolute value equations and advanced  
factoring. (3 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0099 Algebra Fundamentals III (3)  
(Former course prefix/number DM 099)  
Prerequisite: One year of high school algebra and an  
appropriate assessment test score or Developmental  
Mathematics 0098. This is a course in intermediate  
algebra which further develops rational expressions,  
roots, exponents and radicals. Also covered are  
quadratic inequalities, relations functions and graphs  
and system of non-linear equations. (3 Lec.)  
(Coordinating Board Academic Approval Number 3201045237)

DMAT 0100 Review of Basic Mathematical  
Concepts (1)  
Prerequisite: Developmental Mathematics 0093 or  
Developmental Mathematics 0099 or consent of  
instructor. This is a review course for students who have  
completed and passed the recommended developmental  
mathematics sequence of courses but have not passed  
the mathematics section of the TASP test. Emphasis is  
on individual needs. This course cannot be used as a  
prerequisite for any college-level mathematics course.  
This course may be repeated for credit. (1 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0200 Review of Fundamental Mathematical  
Concepts (1)  
Prerequisite: Developmental Mathematics 0093 or  
Developmental Mathematics 0099 or consent of  
instructor. This is a review course for students who have  
completed and passed the recommended developmental  
mathematics sequence of courses but have not passed  
the mathematics section of the TASP test. Emphasis is  
on individual needs. This course cannot be used as a  
prerequisite for any college-level mathematics course.  
This course may be repeated for credit. (1 Lec.)  
(Coordinating Board Academic Approval Number 3201045137)
DMAT 0300 Review of Algebraic and Geometric Concepts (3)
Prerequisite: Developmental Mathematics 0093 or Developmental Mathematics 0099. This is a review course for students who have completed and passed the recommended developmental mathematics sequence of courses but have not passed the mathematics section of the TASP test. Topics include test-taking strategies and practice as well as TASP related mathematical concepts. This course cannot be used as a prerequisite for any college-level mathematics course. (3 Lee.)
(Coordinating Board Academic Approval Number 3201045137)

DMAT 0400 Review of Fundamental Algebraic Concepts (3)
Prerequisite: Developmental Mathematics 0093 or Developmental Mathematics 0099. This is a review course for students who have completed and passed the recommended developmental mathematics sequence of courses but have not passed the mathematics section of the TASP test. Topics include basic operations of real numbers; analysis and interpretation of graphs and tables; solutions and graphs of linear, absolute value and quadratic equations and inequalities; factoring; exponent; principles of geometry; inductive reasoning; and functions. This course cannot be used as a prerequisite for any college-level mathematics course. (2 Lee., 2 Lab.)
(Coordinating Board Academic Approval Number 3201045137)

DEVELOPMENTAL READING

Students can improve their academic success by taking the appropriate reading courses. For an assessment of which course to begin with, talk with a reading faculty member or a counselor.

DREA 0090 Developmental Reading (3)
(Former course prefix/number DR 090)
This course presents basic reading comprehension and vocabulary skills. Basic study skills are introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085235)

DREA 0091 Developmental Reading (3)
(Former course prefix DR 091)
This course continues the development of reading comprehension and vocabulary skills. Study skills are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085235)

DREA 0093 Developmental Reading (3)
(Former course prefix DR 093)
This course offers further development of reading comprehension, vocabulary, and study skills. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085235)

DREA 0100 College Learning Skills in Reading (1)
This course offers further development of reading comprehension, vocabulary, and study skills for students who have completed the developmental reading series, but have not passed the reading portion of the TASP test. This course may be repeated for a maximum of three credits. (1 Lec.)
(Coordinating Board Academic Approval Number 3201085235)

DREA 0200 Learning Skills Improvement in Reading (1)
This course offers further development of reading comprehension and vocabulary for students who have completed the developmental reading series, but have not passed the reading portion of the TASP test. Emphasis is on the development of learning skills according to individual needs. This course may be repeated for a maximum of three credits. (2 Lab.)
(Coordinating Board Academic Approval Number 3201085235)

DREA 0300 Communication Skills in Reading (3)
This course offers basic reading skill training through the use of whole language development. This course is designed for students whose assessment scores indicate special needs. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085235)

DREA 0400 Communication Skills in Reading (3)
This course is for students with significant reading problems. It is organized around reading skill development. Emphasis is on individual needs and personalized programs. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085235)

DEVELOPMENTAL WRITING

Students can improve their writing skills by taking Developmental Writing. These courses are offered for three hours of credit.

DWRI 0090 Developmental Writing (3)
(Former course prefix/number DW 090)
This course introduces the writing process. Course topics include practice in getting ideas, writing and rewriting, making improvements, and correcting mistakes. A learning lab is available to provide additional assistance. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085335)
**DIAGNOSTIC MEDICAL SONOGRAPHY**

**DMSO 1191 Special Topics in Diagnostic Medical Sonography (1)**
(This is a WECM course number. Former course prefix/number SONO 2171.)
Prerequisite: Grade of "C" or better in all previous courses. Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. (1 Lec.)

**DMSO 1192 Special Topics in Diagnostic Medical Sonography (1)**
(This is a WECM course number. Former course prefix/number SONO 2174.)
Prerequisite: Grade of "C" or better in all previous courses. Continuation of superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Detailed study of normal and pathological neonatal head structures. Review of previously covered material. (1 Lec.)

**DMSO 1355 Pathophysiology (3)**
(This is a WECM course number. Former course prefix/number SONO 2275.)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course presents a study of the pathology and pathophysiology of abdominal structures visualized with ultrasound examination, including urinary and reproductive systems, breast and thyroid. Correlations will be made between sonographic examination and disease processes of these organs. (3 Lec.)

**DMSO 1405 Sonography I (4)**
(This is a WECM course number. Former course prefix/number SONO 2475.)
Prerequisite: Admission to program. Detailed study of normal and pathological abdominal structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Laboratory fee. (3 Lec., 2 Lab.)

**DMSO 1351 Sonographic Cross Sectional Anatomy (3)**
(This is a WECM course number. Former course prefix/number SONO 2377.)
Prerequisite: Minimum grade of "C" or better in all previous courses. This course focuses on a detailed study of the anatomy of the abdomen, including the anatomical relationships of organs such as the liver, gallbladder, spleen, vascular system, and pelvis, as it relates to an ultrasound examination. (3 Lec.)
DMSO 1366 Practicum (or Field Experience)-Diagnostic Medical Sonography (3)
(This is a WECM course number. Former course prefix/number SONO 2375.)
Prerequisite: Grade of "C" or better in all previous courses. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. (24 Ext.)

DMSO 2101 Ultrasound Instrumentation (1)
(This is a WECM course number. Former course prefix/number SONO 2173.)
Prerequisite: A grade of "C" or better in all previous courses. This course focuses on the basic pulse-echo ultrasound system including components and function of the scanner, display system, scan converter, and hard copy units. Emphasis on Doppler production and display and safety and performance issues. (1 Lec.)

DMSO 2262 Clinical-Diagnostic Medical Sonography (2)
(This is a WECM course number. Former course prefix/number SONO 2276.)
Prerequisite: Grade of "C" or better in all previous courses. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. (11 Ext.)

DMSO 2263 Clinical-Diagnostic Medical Sonography (2)
(This is a WECM course number. Former course prefix/number SONO 2277.)
Prerequisite: Grade of "C" or better in all previous courses. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. (11 Ext.)

DMSO 2343 Advanced Acoustical Physics (3)
(This is a WECM course number. Former course prefix/number SONO 2378.)
Prerequisite: Grade of "C" or better in all previous courses. Advanced course emphasizing the use of ultrasound instruments including modes of operation, operation control options, techniques for recording static and dynamic images, and advances in transducer design. (3 Lec.)

DMSO 2345 Advanced Sonography Practices (3)
(This is a WECM course number. Former course prefix/number SONO 2379)
Prerequisite: Minimum grade of "C" or better in all previous courses. Advanced sonographic procedures and special topics. Review of previously covered material is included. Vascular methodology, case studies, and film critique are discussed. This is the capstone experience for the DMSO program. (3 Lec.)

DMSO 2366 Practicum (or Field Experience)-Diagnostic Medical Sonography (3)
(This is a WECM course number. Former course prefix/number SONO 2376)
Prerequisite: Grade of "C" or better in all previous courses. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. (24 Ext.)

DMSO 2367 Practicum (or Field Experience)-Diagnostic Medical Sonography (3)
(This is a WECM course number. Former course prefix/number SONO 2477)
Prerequisite: Grade of "C" or better in all previous courses. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. (30 Ext.)

DMSO 2405 Sonography II (4)
(This is a WECM course number. Former course prefix/number SONO 2476)
Prerequisite: Grade of "C" or better in all previous courses. Detailed study of the male and female pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Laboratory fee. (3 Lec., 2 Lab.)

DIGITAL IMAGING TECHNOLOGY
(Formerly Graphics Communications)

GRPH 1223 Digital Imaging I (2)
(This is a WECM course number. Former course prefix/number GRAP 1270.)
An introduction to digital imaging on the computer using image editing and/or image creation software. Topics include: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Laboratory fee. (1 Lec., 2 Lab.)
An introduction to digital imaging on the computer using image editing and/or image creation software. Topics include: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Laboratory fee. (1 Lec., 2 Lab.)

Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use the capabilities specific to vector (object oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included. Laboratory fee. (1 Lec., 2 Lab.)

An introduction to various phases of the graphic arts industry, including the history of printing, techniques involved in the production and distribution of printed materials, the kinds of printing industries and printing terminology. An introduction to printing equipment and relationship of each piece of equipment to the total plant operation and shop safety, including job planning and career data (2 Lec., 4 Lab.)

An introduction to offset printing including knowledge and skills to operate a small offset press to print single color jobs. Emphasis on parts of the press and operation procedures, printing terminology, paper types and ink types and their uses, make ready and cleanup. Laboratory fee. (2 Lec., 4 Lab.)

An introduction to computer layout and design using major components of electronic publishing including text, graphics, and page layout and design using a computer. Introduction to the basic concepts and terminology associated with typography and page layout. Laboratory fee. (2 Lec., 4 Lab.)

An introduction to digital imaging on the computer using image editing and/or image creation software. Topics include: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. (2 Lec., 4 Lab.)

Emphasis on design principles for the creation of advertising and publishing materials such as letterheads, business cards, ads, fliers, brochures, and manuals. Mastery of design principles regarding typography, effective use of color, special graphic effects, informational graphics and output considerations. Emphasis on techniques for planning and documenting projects and on efficient project design techniques. Laboratory fee. (2 Lec., 4 Lab.)

Prerequisite: GRPH 1325. An in-depth investigation to digital imaging on the computer using editing and/or image creation software. Manipulation, creation and editing of digital images. Topics include: image capture, high-end workstations, image bit-depth, interaction with service bureaus and printing industries. (2 Lec., 4 Lab.)

Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use the capabilities specific to vector (object oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included. Laboratory fee. (2 Lec., 4 Lab.)

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)
GRPH 1395 Special Topics in Computer Typographer and Composition Equipment Operator (3)
(This is a WECM course number. Former course prefix/number GRAP 1375.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

GRPH 1396 Special Topics in Desktop Publishing Equipment Operator (3)
(This is a WECM course number. Former course prefix/number GRAP 1372.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

GRPH 2336 Prepress Techniques (3)
(This is a WECM course number. Former course prefix/number GRAP 2380)
Hands-on experience in both electronic file imaging and traditional graphics camera use. Electronic file output and troubleshooting, graphics camera knowledge, traditional film assembly, and proofing process. High-end color scanning. Laboratory fee. (2 Lec., 4 Lab.)

GRPH 2341 Electronic Publishing III (3)
(This is a WECM course number. Former course prefix/number GRAP 2375.)
Advanced concepts in electronic publishing using an industry standard page layout software package. In-depth color separations, trapping and advanced techniques for controlling type and graphics. Overview of color schemes, software additions (plug-ins, filters, utilities), and preparation of files for printing. Laboratory fee. (2 Lec., 4 Lab.)

GRPH 2381 Cooperative Education-Graphic and Printing Equipment Operator (3)
(This is a WECM course number. Former course prefix/number GRAP 7471.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)

IMED 2311 Portfolio Development (3)
(This is a WECM course number.)
Emphasis on preparation and enhancement of portfolio to meet professional standards, professional organizations, presentation skills, and job seeking techniques. (2 Lec., 4 Lab.)

PHTC 1349 Photo Digital Imaging I (3)
(This is a WECM course number.)
Instruction in the computer as an electronic darkroom. Topics include: color and gray scale, scale images, and image conversion and presentation. (2 Lec., 4 Lab.)

PHTC 2349 Photo Digital Imaging II (3)
(This is a WECM course number.)
Prerequisite: PHTC 1349. Continued skill development in the use of the computer for retouching, copying, photographic restoration, color correction, data importation, composite imaging, and background dropout and replacement. (2 Lec., 4 Lab.)
DRAMA
(Formerly Theatre)

DRAM 1120 Rehearsal And Performance I (1)
(This is a common course number. Former course prefix/number THE 114)
Participation in the class may include any phase of rehearsal and performance of the current theatrical presentation. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5005015230)

DRAM 1170 Demonstration Lab (1)
(Former course prefix/number THE 199)
Scenes studied in various theatre classes are demonstrated to show contrast and different styles. This course may be repeated for credit. (1 Lab.)
(Coordinating Board Academic Approval Number 5005015130)

DRAM 1221 Rehearsal And Performance II (2)
(This is a common course number. Former course prefix/number THE 210)
Participation in the class may include any phase of rehearsal and performance of the current theatrical presentation. This course may be repeated for credit. (6 Lab.)
(Coordinating Board Academic Approval Number 5005015130)

DRAM 1310 Introduction To The Theatre (3)
(This is a common course number. Former course prefix/number THE 101)
The various aspects of the theatre are surveyed. Topics include plays, playwrights, directing, acting, theatres, artists, and technicians. (3 Lec.)
(Coordinating Board Academic Approval Number 5005015130)

DRAM 1323 Theatre Workshop (3)
(This is a common course number. Former course prefix/number THE 236)
A course in theatre with emphasis on performance techniques in musical and/or repertory theatre with practical performance experience. This course may be repeated for credit. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005015230)

DRAM 1330 Stagecraft I (3)
(This is a common course number. Former course prefix/number THE 103)
The technical aspects of play production are studied. Topics include shop procedures, the planning and fabrication of scenic elements, and backstage operations. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 1341 Make-Up For The Stage (3)
(This is a common course number. Former course prefix/number THE 105)
The craft of make-up is explored. Both theory and practice are included. Laboratory fee. (3 Lec.)
(Coordinating Board Academic Approval Number 5005025230)

DRAM 1351 Acting I (3)
(This is a common course number. Former course prefix/number THE 106)
The theory of acting and various exercises are presented. Body control, voice, interpretation, characterization, and stage movement are included. Both individual and group activities are used. Specific roles are analyzed and studied. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)

DRAM 1352 Acting II (3)
(This is a common course number. Former course prefix/number THE 107)
Prerequisite: Drama 1351 or demonstrated competence approved by the instructor. This course is a continuation of Drama 1351. Emphasis is on characterization and ensemble acting. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)

DRAM 1370 Contemporary Theatre (3)
(Former course prefix/number THE 102)
This course is a study of the modern theatre. The historical background and traditions of each style are included. Emphasis is on understanding the social, culture, and aesthetic significance of each style. A number of modern plays are read and selected video tapes are viewed. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055130)

DRAM 2331 Stagecraft II (3)
(This is a common course number. Former course prefix/number THE 104)
Emphasis is placed on the design process and individual projects. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 2336 Voice And Articulation (3)
(This is a common course number. Former course prefix/number THE 109)
Students may register for either Speech 1342 or Drama 2336 but may receive credit for only one of the two. Emphasis is on improving voice and pronunciation. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015835)

DRAM 2351 Scene Study I (3)
(This is a common course number. Common Course Number THE 205)
Prerequisites: Drama 1351 and 1352. Emphasis is on the study, rehearsal and performance of selected scenes of various periods and styles. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)
DRAM 2352 Scene Study II (3)
(This is a common course number. Former course prefix/number THE 207)
Prerequisite: Drama 2351. This course is a continuation of Drama 2351. Emphasis is on individual needs of the student and the various styles of production. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005035130)

DRAM 2361 History Of Theatre I (3)
(This is a common course number. Former course prefix/number THE 110)
Drama is surveyed from its beginning through the 16th century. The theatre is studied in each period as a part of the total culture of the period. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055130)

DRAM 2362 History Of Theatre II (3)
(This is a common course number. Former course prefix/number THE 111)
Drama is surveyed from the 17th century through the 20th century. The theatre is studied in each period as a part of the total culture of the period. (3 Lec.)
(Coordinating Board Academic Approval Number 5005055130)

DRAM 2366 Development of the Motion Pictures (3)
(This is a common course number. Former course prefix/number THE 203)
Emphasis on the analysis of the visual and aural aspects of selected motion pictures, dramatic aspects of narrative films, and historical growth and sociological effect of film as an art. (3 Lec.)
(Coordinating Board Academic Approval Number 5006025130)

DRAM 2370 Television Production I (3)
(Former course prefix/number THE 201)
Station organization, studio operation, and the use of studio equipment are introduced. Topics include continuity, camera, sound, lights, and videotape recording. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

DRAM 2371 Television Production II (3)
(Former course prefix/number THE 202)
Prerequisite: Drama 2370. This course is a continuation of Drama 2370. Emphasis is on the concept and technique of production in practical situations. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 1001045226)

DRAM 2373 Introduction To Technical Drawing (3)
(Former course prefix/number THE 208)
Basic techniques of drafting are studied. Isometrics, orthographic projections, and other standard procedures are included. The emphasis is on theatrical drafting, including ground plans, vertical sections, construction elevations, and spider perspective. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 2374 Lighting Design (3)
(Former course prefix/number THE 209)
The design and techniques of lighting are covered. Topics include instrumentation, electricity, control and practical experience. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 5005025130)

DRAM 2375 Broadcasting Communications I (3)
(Former course prefix/number THE 211)
Basic techniques of television and video performance are introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035226)

DRAM 2376 Broadcasting Communications II (3)
(Former course prefix/number THE 212)
Prerequisite: Drama 2375 or demonstrated competence approved by the instructor. This course is a continuation of Drama 2375. Emphasis is on radio and television as mass media and practical applications in both radio and television. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035226)

EARTH SCIENCE
(See Geology)

ECHOCARDIOLOGY TECHNOLOGY

DCMS 1214 Introduction to the Echocardiology Lab (2)
(This is a WECM course number. Partial equivalent to ECHO 1270)
Prerequisite: Admission to the Echocardiology Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. This course is an introductory lab for learning cardiac ultrasound. The student will obtain hands-on experience in a laboratory setting with the opportunity to scan volunteers. Emphasis will be placed on instrumentation, on imaging, and the identification of cardiac anatomy. The student will also be introduced to Doppler, color flow mapping, and M-mode. (2 Lec.)
DCMS 1260 Clinical - Echocardiology Technology (2)
(This is a WECM course number.)
Prerequisite: Admission to the Echocardiology Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the college faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Emphasis will be placed on instrumentation, on imaging and the identification of cardiac anatomy. The student will be introduced to Doppler, color flow mapping, and M-mode studies in the clinical setting. (9 Ext.)

DCMS 1291 Special Topics in Echocardiology Technology (2)
(This is a WECM course number.)
Prerequisite: Grade of "C" or better in all previous DCMS and support courses. Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Course may be repeated if topics and learning outcomes vary. (2 Lec.)

DCMS 1304 Cardiovascular Physiology (3)
(This is a WECM course number. Equivalent to CYTT 1304. No former course prefix/number.)
Prerequisite: Admission to the Echocardiology Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. A study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Focus on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart. (3 Lec.)

DCMS 1313 Echocardiology Lab Fundamentals I (3)
(This is a WECM course number. Former course prefix/number ECHO 1370.)
Prerequisite: Admission to the Echocardiology Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the college faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Emphasis will be placed on instrumentation, on imaging and the identification of cardiac anatomy. The student will be introduced to Doppler, color flow mapping, and M-mode studies in the clinical setting. (9 Ext.)

DCMS 2240 Noninvasive Vascular Echocardiography (2)
(This is a WECM course number.)
Prerequisite: Grade of "C" or better in all previous DCMS and support courses. Introduction to noninvasive vascular studies, primarily using ultrasound to diagnose disease states. The student will learn the role of the echocardiographer in vascular studies. Emphasis will be on the anatomy and physiology of the vascular system, hemodynamics, and pathophysiology of the vascular system. The student will learn the different tests and techniques for noninvasive studies of the peripheral arteries, veins, and cerebrovascular system. (2 Lec.)

DCMS 2410 Echocardiology I (4)
(This is a WECM course number. Former course prefix/number ECHO 2470.)
Prerequisite: Grade of "C" or better in all previous DCMS and support courses. This course is a continuation of Echocardiology Lab Fundamentals. Special emphasis is placed on heart pathologies. This course includes a discussion of pericardial disease, cardiomyopathies, cardiac masses, and endocarditis. Laboratory fee. (3 Lec., 3 Lab.)

DCMS 2450 Echocardiology II (4)
(This is a WECM course number. Former course number/prefix ECHO 2471.)
Prerequisite: Grade of "C" or better in all previous DCMS and support courses. This course is a continuation of Echocardiology I. Emphasis in this course is placed on the two-dimensional images, Doppler waveforms, and color-flow mapping. Written reports, review of current professional literature, and attendance at conferences are required. This course contains the capstone experience for the Allied Health Imaging - Echocardiography Technology program. Laboratory fee. (3 Lec., 3 Lab.)
DCMS 2660 Clinical - Echocardiology Technology (6)
(This is a WECM course number. Former course number/prefix ECHO 2670.)
Prerequisite: Grade of "C" or better in all previous DCMS and support courses. A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the college faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Emphasis will be placed on imaging and the identification of cardiac anatomy in the standard echocardiography views. The student will apply the principles of medical ethics, professionalism, and proper imaging protocol to the instructor, student, physician, and clinical staff. (32 Ext.).

ECOLOGY

NOTE: This course will carry a Dallas County Community College prefix of "ECOL"; however, it may also be identified by a common course number for transfer evaluation purposes. Both are listed in the course description.

ECOL 1305 People And Their Environment (3)
(Former course prefix/number ECY 291. The common course number is GEOL 1305.)
Environmental awareness and knowledge are emphasized. Topics include pollution, erosion, land use, energy resource depletion, overpopulation, and the effects of unguided technological development. Proper planning of societal and individual action in order to protect the natural environment is stressed. (3 Lec.)
(Coordinating Board Academic Approval Number 0301025339)

ECONOMICS

ECON 1303 Economics Of Contemporary Social Issues (3)
(This is a common course number. Former course prefix/number ECO 105)
This course is an application of the basic economic concepts to the study of social issues and issues of public policy. Topics such as the environment, health care, welfare reform, poverty, job security and economic growth are discussed. This course may also serve as preparation for Economics 2301 and Economics 2302, but will not replace either of these courses where they are required in a specific degree plan. (3 Lec.)
(Coordinating Board Academic Approval Number 1904025242)

ECON 2301 Principles Of Economics I (3)
(This is a common course number. Former course prefix/number ECO 201)
Sophomore standing is recommended. An introduction to principles of macroeconomics is presented. Economic principles are studied within the framework of classical, Keynesian, monetarist and alternative models. Emphasis is given to national income determination, money and banking, and the role of monetary and fiscal policy in economic stabilization and growth. Other topics include international trade and finance. (3 Lec.)
(Coordinating Board Academic Approval Number 4506015142)
ECON 2302 Principles Of Economics II (3)
(This is a common course number. Former course prefix/number ECO 202)
Prerequisite: Sophomore standing is recommended. The principles of microeconomics are presented. Topics include the theory of demand, supply, and price of factors. Income distribution and theory of the firm are also included. Emphasis is given to microeconomic applications of international trade and finance as well as other contemporary microeconomic problems. (3 Lec.)
(Coordinating Board Academic Approval Number 4506015142)

ECON 2311 Economics of Global Issues (3)
(This is a common course number. Former course prefix/number ECO 203)
This course examines the history and theory of international trade and global economic development. Economic, social, cultural, and political issues which impact the global economy and basic human welfare are studied. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015242)

EDUCATIONAL PERSONNEL

EDTC 1164 Practicum (or Field Experience)-Teacher Assistant/Aide (1)
(This is a WECM course number. Former course prefix/number EDUC 7271/EDUC 7371/EP 703/EP 702)
Prerequisite: The completion of two EDTC courses or Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (10 Lab.)

EDTC 1165 Practicum (or Field Experience)-Teacher Assistant/Aide (1)
(This is a WECM course number. Former course prefix/number EDUC 7272/EDUC 7372/EP 712/EP 713)
Prerequisite: The completion of two EDTC courses or Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (10 Lab.)

EDTC 1194 Special Topics in Teacher Assistant/Aide (1)
(This is a WECM course number. Former course prefix/number EDUC 2170/EP 245)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec.)

EDTC 1294 Special Topics in Teacher Assistant/Aide (2)
(This is a WECM course number. Former course prefix/number EDUC 2270/EP 246)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (2 Lec.)

EDTC 1301 Instructional Practices: Educational Processes (3)
(This is a WECM course number. Former course prefix/number EDUC 1371/EP 131)
A study of the role and responsibility of the instructional teacher assistant with emphasis on development of professionalism and effective communication strategies with adults. Topics include the various code of ethics governing the educational field, the issue of confidentiality, learners' rights and responsibilities, and challenges facing schools. (3 Lec.)

EDTC 1307 Teaching Reading in the Elementary School (3)
(This is a WECM course number. Former course prefix/number EDUC 1370/EP 129)
Fundamental concepts and principles of reading instruction. Topics include readiness, beginning reading instruction, how literacy emerges, classroom learning environments, word-attack skills, study skills, comprehension, other aspects of the reading program, and examination of varied materials and techniques for teaching reading. (3 Lec.)

EDTC 1321 Bilingual Education (3)
(This is a WECM course number. Former course prefix/number EDUC 1377/EP 143)
A course in the core techniques of bilingual education. Topics include awareness of cultural diversity, teaching techniques, material development, and historical and philosophical concepts of bilingual/bicultural education. (3 Lec.)
EDTC 1325 Principles and Practices of Multicultural Education (3)
(This is a WECM course number. Former course prefix/number EDUC 1375/EP 136)
Examination of cultural variations found in our society and reflected in our pluralistic classrooms. Topics include culturally influenced behavior, major cultures, cultural diversity, and the process of intercultural communication and teaching, including differences in lifestyles, communication styles, learning styles, and various sources of stress for diverse cultural groups. (3 Lec.)

EDTC 1341 Computer Instruction for Educators (3)
(This is a WECM course number. Former course prefix/number EDUC 2370/EP 210)
A course in specialized computer utilization for educators. Topics include the integration of educational computer terminology, systems operations, software, and multimedia in the contemporary classroom environment. (2 Lec., 2 Lab.)

EDTC 1364 Practicum (or Field Experience)-Teacher Assistant/Aide (3)
(This is a WECM course number. Former course prefix/number EDUC 7471/EP 704)
Prerequisite: The completion of two EDTC courses or Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (21 Lab.)

EDTC 1365 Practicum (or Field Experience)-Teacher Assistant/Aide (3)
(This is a WECM course number. Former course prefix/number EDUC 7472/EP 714)
Prerequisite: The completion of two EDTC courses or Instructor's approval. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (21 Lab.)

EDTC 1391 Special Topics in English Teacher Education (3)
(This is a WECM course number. Former course prefix/number EDUC 2371/EP 241).
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)

EDTC 1394 Special Topics in Teacher Assistant/Aide (3)
(This is a WECM course number. Former course prefix/number EDUC 2372/EP 247)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)

ELECTRICAL CONSTRUCTION

ELTN 1271 Electrical Theory I (2)
(This is a local need course number. Former course prefix/number ELCT 1371)
The course sets the basic for the study of electricity as used in the electrical construction industry. The structure of matter, the electron theory, and magnetism lead into the study of the courses and effects of electricity. Studies the foundation for the calculation and study of various laws of electrical circuits as these laws are applied to the performance of pressure, flow and resistance in series and parallel circuits used in the electrical construction industry. (2 Lec., 1 Lab.)

ELTN 1272 Electrical Job Information I (2)
(This is a local need course number. Former course prefix/number ELCT 1372)
This course covers the orientation in the electrical construction industry, including safety, OSHA regulations and requirements for the electrical construction industry. Basic electrician's tools and electrical materials, wire and various wiring methods are also covered. An introduction to the National Electrical Code (NEC). (2 Lec., 1 Lab.)

ELTN 1273 Electrical Theory II (2)
(This is a local need course number. Former course prefix/number ELCT 1373)
Electrical sources, such as batteries and generators are studied in the course. Starting with the principles of generation and progressing through direct current generators, alternating current generators, and into the basics of direct current motors. There is also including a simple introduction to alternating current circuits and systems in the course. (2 Lec., 1 Lab.)
ELTN 1274 Electrical Job Information II (2)
(This is a local need course number. Former course prefix/number ELCT 1374)
This course covers an orientation to the Apprenticeship Committee's operations and the sponsoring organizations. On-the-job safety is covered. The basics of blueprints and progressing into residential blueprints and the NEC concerning residential installations are covered. An exposure is given to grounding, fuses, overcurrent protection, and lighting. (2 Lec., 1 Lab.)

ELTN 1275 Electrical Theory III (2)
(This is a local need course number. Former course prefix/number ELCT 1375)
This course will cover alternating current circuits, terminology, characteristics, and components. AC circuits components will include inductance, inductive reactance, capacitance, capacitive reactance, impedance, and power factor. Also including AC circuit calculations. (2 Lec., 1 Lab.)

ELTN 1276 Electrical Job Information III (2)
(This is a local need course number. Former course prefix/number ELCT 1376)
Various types of sketching and drawing are covered in this lesson before going on to the study of small commercial blueprints and installations. Special construction situations are covered in motor drives, rigging, fastening devices, safety, electrical shock, and safety for electrical shock. The electrical testing part of the course will cover rectifiers, DC meters, and AC meters. Information on parliamentary procedures and conducting a meeting are also covered. (2 Lec., 1 Lab.)

ELTN 1277 Electrical Theory IV (2)
(This is a local need course number. Former course prefix/number ELCT 1377)
This course picks up where course ELTN 1275 ended with power factor and starts on power factor problems and corrections. Series parallel LCR circuit calculations and uses are covered. Also, lighting types, principles of operation, and applications of the NEC to lighting installations is studied. (2 Lec., 1 Lab.)

ELTN 1278 Electrical Job Information IV (2)
(This is a local need course number. Former course prefix/number ELCT 1378)
This course teaches electrical construction precision conduit bending as installed in an electrical installation. An introduction to motor controls, refrigeration, and air conditioning is presented in preparation for future motor controls. The Assembly of the NEC is a study of the way the NEC is put together, how to make NEC interpretations with job situations and applications. (2 Lec., 1 Lab.)

ELTN 2270 Electrical Theory V (2)
(This is a local need course number. Former course prefix/number ELCT 2370)
The apprentice will receive from this course an understanding of the transformers as installed by the construction electricians. The theory of operation, construction, uses, and various transformer connections will be covered. Electrical distribution systems are also covered. (2 Lec., 1 Lab.)

ELTN 2271 Electrical Job Information V (2)
(This is a local need course number. Former course prefix/number ELCT 2371)
This course will consist of the apprentice using a complete set of blueprints of a multi-stored building along with the specifications for the particular installation. Electrical controls, including fire alarms and motor controls will be covered. Motor controls start from the basic equipment and circuits and progress into the more complicated and specialized control circuits. (2 Lec., 1 Lab.)

ELTN 2272 Electrical Theory VI (2)
(This is a local need course number. Former course prefix/number ELCT 2372)
This course covers the motors and electrical construction electrician will install. Some of the topics are: principles of operation, various types of single and three phase motors, along with the NEC for motors, along with the NEC for motors. An informational lesson of construction economics is included. The NEC hazardous locations are a part of this course. (2 Lec., 1 Lab.)

ELTN 2273 Electrical Job Information VI (2)
(This is a local need course number. Former course prefix/number ELCT 2373)
This course follows up course ELTN 2371 as it covers motor control wiring, diagrams, schematic diagram reading, control circuit development, analysis, and troubleshooting, with specialized applications of control circuits. (2 Lec., 1 Lab.)

ELTN 2274 Electrical Theory VII (2)
(This is a local need course number. Former course prefix/number ELCT 2374)
This course begins the study of electronics including the electron theory of vacuum tubes, rectifiers, power supplies and amplifiers. Semiconductors, transistors, and transistor circuits are also covered. (2 Lec., 1 Lab.)
ELTN 2275 Electrical Job Information VII (2)
(This is a local need course number. Former course prefix/number ELCT 2375)
This course is a continuing study of the blueprints and specifications started in course ELTN 2371 with special consideration given to the study of the electrical installation. The metric system is covered. Electrical construction’s installations of instrumentation equipment are covered. Instrumentation covers the recognition, applications, and characteristics of temperature, pressure, and flow controls and equipment. On-the-job relationships and leadership are presented along with OSHA safety in preparation for the apprentice to take over as a journeyman. Nuclear energy and nuclear energy safety are studied also. (2 Lec., 1 Lab.)

ELTN 2276 Electrical Theory VIII (2)
(This is a local need course number. Former course prefix/number ELCT 2376)
This course takes up where ELTN 2274 ended. Static control elements, logic circuits and their application in the electrical construction industry are studied. NEC calculations involving raceway fills, box sizes with various conductors, box sizes, and transformer loads are part of the course. (2 Lec., 1 Lab.)

ELTN 2277 Electrical Job Information VIII (2)
(Former course prefix/number ELCT 2377)
This course consists of an in-depth study of the NEC. It will include recent changes in the NEC, electrical material limitations, and electrical installation support requirements, exemptions to the Code, and special applications and situations. This course prepares the student for the journeyman examination as required by most cities. (2 Lec., 1 Lab.)

ELTN 2278 Electrical Theory IX (2)
(This is a local need course number. Former course prefix/number ELCT 2378)
The National Electrical Code will be studied with special emphasis on sections covering branch circuits, feeders, and service loads. Orientation regarding labor and management aspects of the electrical construction industry will also be covered. (2 Lec., 1 Lab.)

ELTN 2279 Electrical Job Information IX (2)
(This is a local need course number. Former course prefix/number ELCT 2379)
Advanced elements and methods of process control will be studied along with basic fire alarm systems and wiring. Also, low voltage systems for security and energy management will be covered. (2 Lec., 1 Lab.)

ELTP 1215 Electrical Calculations I (2)
(This is a WECM course number.)
Introduction to mathematical applications utilized to solve problems in the electrical field. Topics include fractions, decimals, percentages, simple equations, ratio and proportion, unit conversions, and applied geometry. (2 Lec., 1 Lab.)

ELTP 2270 Electrical Theory X (2)
(This is a local need course number.)
This course is devoted to Programmable Controllers. Topics include basic hardware, processors, numbering systems, ladder diagrams, relays, timers, programming, and troubleshooting. (2 Lec., 1 Lab.)

ELTP 2271 Electrical Job Information X (2)
(This is a local need course number.)
This course is devoted to fire alarm systems, instrumentation, flow control, basic telephone systems, and advanced security systems. Diagrams, wiring connections, operation, and troubleshooting of each type of system will be included. (2 Lec., 1 Lab.)

ELECTRICAL TECHNOLOGY

CETT 1429 Solid State Devices (4)
(This is a WECM course number. Former course prefix/number ELEC 2371.)
A study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bi techniques, and thermal considerations of solid state devices. Lab required. (3 Lec., 2 Lab.)

EEIR 1307 Introductory Security Systems (3)
(This is a WECM course number. Former course prefix/number ELEC 1370.)
A study of the maintenance, troubleshooting, and repair of security systems. Emphasis on the installation of security systems with supervision. Lab required. (2 Lec., 2 Lab.)

ELPT 1215 Electrical Calculations I (2)
(This is a WECM course number.)
Introduction to mathematical applications utilized to solve problems in the electrical field. Topics include fractions, decimals, percentages, simple equations, ratio and proportion, unit conversions, and applied geometry. Lab required. (2 Lec., 1 Lab.)
ELPT 1221 Introduction to Electrical Safety and Tools (2)
(This is a WECM course number. Former course prefix/number ELEC 1270.)
A comprehensive overview of safety rules and regulations and the selection, inspection, use, and maintenance of common tools for electricians. Lab required. (2 Lec., 1 Lab.)

ELPT 1325 National Electrical Code I (3)
(This is a WECM course number. Former course prefix/number ELEC 1271.)
An introductory study of the National Electric Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis on wiring design, protection, methods, and materials; equipment for general use; and basic calculations. Lab required. (2 Lec., 2 Lab.)

ELPT 1329 Residential Wiring (3)
(This is a WECM course number. Former course prefix/number ELEC 1371.)
Instruction in wiring methods used for single family, two family, and multi-family dwellings. Lab required. (2 Lec., 4 Lab.)

ELPT 1345 Commercial Wiring (3)
(This is a WECM course number. Former course prefix/number ELEC 2370.)
Instruction in commercial wiring methods. Lab required. (2 Lec., 4 Lab.)

ELPT 1349 Electrical Blueprint Reading (3)
(This is a WECM course number. Former course prefix/number ELEC 1472.)
An overview of electrical blueprint reading. Topics include symbols, specifications, panel and lighting schedules, and riser diagrams. Lab required. (2 Lec., 3 Lab.)

ELPT 1351 Electrical Machines (3)
(This is a WECM course number. Former course prefix/number ELEC 2272.)
General principles and fundamentals of direct current (DC) motors, single-phase and polyphase alternating current (AC) motors, generators, and alternators. Emphasis on their construction, characteristics, efficiencies, starting, and speed control. Lab required. (3 Lec.)

ELPT 1357 Industrial Wiring (3)
(This is a WECM course number. Former course prefix/number ELEC 2270.)
Instruction in wiring methods used for industrial installations. Lab required. (1 Lec., 2 Lab.)

ELPT 1411 Basic Electrical Theory (4)
(This is a WECM course number. Former course prefix/number ELEC 1470.)
An overview of the theory and practice of electrical circuits including calculations as applied to alternating and direct current. Lab required. (3 Lec., 3 Lab.)

ELPT 1441 Motor Control (4)
(This is a WECM course number. Former course prefix/number ELEC 2374.)
Study of the operating principles of solid-state controls along with their practical applications. Topics include braking, jogging, plugging, and safety interlocks. Lab required. (3 Lec., 3 Lab.)

ELPT 2437 Electrical Planning and Estimating (4)
(This is a WECM course number. Former course prefix/number ELEC 2375.)
Instruction in preparation of estimates for residential, commercial, and industrial wiring systems. Skills development in a variety of electrical techniques. Lab required. (3 Lec., 3 Lec.)

ELPT 2443 Electrical Systems Design (4)
(This is a WECM course number. Former course prefix/number ELEC 2470.)
Skill development in the electrical design of a commercial or industrial project including building layout, types of equipment, placement, sizing of electrical equipment, and all electrical calculations according to the requirements of the National Electrical Code (NEC). Lab required. (3 Lec., 2 Lab.)

ELTN 1380 Cooperative Education - Electrician (3)
(This is a WECM course number. Former course prefix/number ELEC 7371.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lab required. (1 Lec., 20 Ext.)

ELTN 1381 Cooperative Education - Electrician (3)
(This is a WECM course number. Former course prefix/number ELEC 7372.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lab required. (1 Lec., 20 Ext.)

IEIR 1412 Distribution Systems (4)
(This is a WECM course number. Former course prefix/number ELEC 1471.)
Fundamentals of distribution systems including single phase and three phase systems, grounding, ground fault protection, and the national electric code. Lab required. (3 Lec., 3 Lab.)
ELECTRONIC TELECOMMUNICATIONS

CETT 1441 Solid State Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2486.)
Suggested prerequisite: CETT 1429. A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Topics will include JFETs, MOSFETs, oscillators, thyristors, power supply systems, voltage regulators, multistage amplifiers and power amplifiers. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1445 Microprocessor (4)
(This is a WECM course number. Former course prefix/number ELET 2491.)
Suggested prerequisite: CETT 1425. An introductory course in microprocessor software and hardware; its architecture, timing sequence, operation, and programming; and discussion of appropriate software diagnostic language and tools. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2435 Advanced Microprocessors (4)
(This is a WECM course number. Former course prefix/number ELET 2492.)
Suggested prerequisite: CETT 1445. An advanced course utilizing the microprocessor in control systems and interfacing. Emphasis on microprocessor hardware and implementation of peripheral interfacing. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2449 Research And Project Design (4)
(This is a WECM course number. Former course prefix/number ELET 2370.)
Suggested prerequisite: CETT 1429. Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. The student will build a project using the principles of the electrical/electronic design process; write an operations procedure of an electrical/electronic project; and demonstrate the operation of function of an electrical/electronic project. Laboratory fee. (2 Lec., 4 Lab.)

EECT 1104 Electronic Soldering (1)
(This is a WECM course number. Former course prefix/number ELET 1171.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be primarily on terminal and printed circuit board through-hole soldering. Laboratory fee. (2 Lab.)

EECT 1204 Electronic Soldering (2)
(This is a WECM course number.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be on surface-mount soldering techniques. Laboratory fee. (1 Lec., 2 Lab.)

EECT 1300 Technical Customer Service (3)
(This is a WECM course number.)
General principles of customer service within a technical environment. Topics include internal/external customer relationships, time-management, best practices, and verbal and non-verbal communications skills. (3 Lec.)

EECT 1346 Telecommunications Trafficking Engineering (3)
(This is a WECM course number.)
Suggested prerequisite: EECT 1401. A study of telecommunications traffic management including blocking avoidance schemes, data collection and analysis and reporting techniques. (3 Lec.)

EECT 1401 Introduction To Telecommunications (4)
(This is a WECM course number. Former course prefix/number ETEL 1170.)
An overview of the telecommunications industry. Topics include the history of the telecommunications industry, terminology, rules and regulations and industry standards and protocols. Laboratory fee. (3 Lec., 3 Lab.)

EECT 1442 Telecommunications Outside Plant (4)
(This is a WECM course number.)
Suggested prerequisite: EECT 1401. A study of outside plant facilities with emphasis on cabling layout design, splicing, bonding, grounding and facility protection systems. Safety practices and procedures are included. Laboratory fee. (3 Lec., 3 Lab.)

EECT 1444 Telecommunications Broadband Systems (4)
(This is a WECM course number.)
Suggested prerequisite: EECT 1401. A survey of telecommunications broadband transmissions systems including protocols, testing, applications and safety practices. Laboratory fee. (3 Lec., 3 Lab.)
EECT 2381 Cooperative Education - Electrical, Electronic And Communications Engineering Technology/Technician (3)
(This is a WECM course number. Former course prefix/number ELET 7472.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (1 Lec., 20 Ext.)

EECT 2430 Telecommunications Switching (4)
(This is a WECM course number. Former course prefix/number ETEL 2472.)
Suggested prerequisite: EECT 1401. The operation of telecommunications switching equipment and related software. Topics include installation, testing, maintenance, and troubleshooting. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2432 Telecommunications Signaling (4)
(This is a WECM course number. Former course prefix/number ETEL 2475.)
Suggested prerequisite: EECT 1401. The study of signaling schemes in telecommunications. Topics include circuits and systems necessary to implement signaling protocols, conversions and formats. Also included is the study of the history of signaling schemes. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2433 Telephone Systems (4)
(This is a WECM course number.)
A study of installation and maintenance systems including telephone set, public switched networks, local exchanges, networks, two and four wire systems, tip and ringing requirements, and digital transmission techniques. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2435 Telecommunications (4)
(This is a WECM course number. Former course prefix/number ETEL 2474.)
Suggested prerequisite: CETT 2439. A study of modern telecommunications systems incorporating microwave, satellite, optical, and wire/cable-based communications systems. Instruction in installation, testing, and maintenance of communications systems components. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2437 Wireless Telephony Systems (4)
(This is a WECM course number. Former course prefix/number ETEL 2478.)
Suggested prerequisite: EECT 1401. Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment and access protocol. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2440 Telecommunications Central Office Equipment (4)
(This is a WECM course number. Former course prefix/number ETEL 2476.)
Suggested prerequisite: EECT 1401. An examination of the theory, operation and maintenance of central office telecommunications equipment. This course is designed to make the student familiar with the installation of telecommunications switching equipment, interpretation of technical documents, and standard practices and procedures including safety procedures. Laboratory fee. (3 Lec., 3 Lab.)

LOTT 1401 Introduction To Fiber Optics (4)
(This is a WECM course number. Former course prefix/number ETEL 2477.)
An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors. Laboratory fee. (3 Lec., 3 Lab.)

ELECTRONIC TELECOMMUNICATIONS
(CONVERGENCE TECHNOLOGY)

CETT 1441 Solid State Circuits (4)
(This is a WECM course number. Former course prefix/number ETEL 2486.)
Suggested prerequisite: CETT 1429. A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Topics will include JFETs, MOSFETs, oscillators, thyristors, power supply systems, voltage regulators, multistage amplifiers and power amplifiers. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1445 Microprocessor (4)
(This is a WECM course number. Former course prefix/number ETEL 2491.)
Suggested prerequisite: CETT 1425. An introductory course in microprocessor software and hardware; its architecture, timing sequence, operation, and programming; and discussion of appropriate software diagnostic language and tools. Laboratory fee. (3 Lec., 3 Lab.)
CETT 2435 Advanced Microprocessors (4)  
(This is a WECM course number. Former course prefix/number ELET 2492.)  
Suggested prerequisite: CETT 1445. An advanced course utilizing the microprocessor in control systems and interfacing. Emphasis on microprocessor hardware and implementation of peripheral interfacing. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2449 Research And Project Design (4)  
(This is a WECM course number. Former course prefix/number ELET 2370.)  
Suggested prerequisite: CETT 1429. Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. The student will build a project using the principles of the electrical/electronic design process; write an operations procedure of an electrical/electronic project; and demonstrate the operation of function of an electrical/electronic project. Laboratory fee. (2 Lec., 4 Lab.)

EECT 1104 Electronic Soldering (1)  
(This is a WECM course number. Former course prefix/number ELET 1171.)  
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be primarily on terminal and printed circuit board through-hole soldering. Laboratory fee. (2 Lab.)

EECT 1204 Electronic Soldering (2)  
(This is a WECM course number.)  
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be on surface-mount soldering techniques. Laboratory fee. (1 Lec., 2 Lab.)

EECT 1300 Technical Customer Service (3)  
(This is a WECM course number.)  
General principles of customer service within a technical environment. Topics include internal/external customer relationships, time-management, best practices, and verbal and non-verbal communications skills. (3 Lec.)

EECT 1346 Telecommunications Trafficking Engineering (3)  
(This is a WECM course number.)  
Suggested prerequisite: EECT 1401. A study of telecommunications traffic management including blocking avoidance schemes, data collection and analysis and reporting techniques. (3 Lec.)
EECT 2432 Telecommunications Signaling (4)
(This is a WECM course number. Former course prefix/number ETEL 2475.)
Suggested prerequisite: EECT 1401. The study of signaling schemes in telecommunications. Topics include circuits and systems necessary to implement signaling protocols, conversions and formats. Also included is the study of the history of signaling schemes. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2433 Telephone Systems (4)
(This is a WECM course number.)
A study of installation and maintenance systems including telephone set, public switched networks, local exchanges, networks, two and four wire systems, tip and ringing requirements, and digital transmission techniques. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2435 Telecommunications (4)
(This is a WECM course number. Former course prefix/number ETEL 2474.)
Suggested prerequisite: CETT 2439. A study of modern telecommunications systems incorporating microwave, satellite, optical, and wire/cable-based communications systems. Instruction in installation, testing, and maintenance of communications systems components. Laboratory fee. (3 Lec., 3 Lab.)

ELECTRONICS/COMPUTER TECHNOLOGY

CETT 1403 DC Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 1470.)
DC Circuits is a study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1405 AC Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 1471.)
Suggested prerequisite: CETT 1403. AC Circuits is a study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1425 Digital Fundamentals (4)
(This is a WECM course number. Former course prefix/number ELET 1473, ENGT 2471, or SEMI 1470.)
An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1429 Solid State Devices (4)
(This is a WECM course number. Former course prefix/number ELET 1472.)
Suggested prerequisite: CETT 1403 and credit or concurrent enrollment in CETT 1405. Solid State Devices is a study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bias techniques, and thermal considerations of solid state devices. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1441 Solid State Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2486.)
Suggested prerequisite: CETT 1403 and credit or concurrent enrollment in CETT 1405. Solid State Circuits is a study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Topics will include JFETs, MOSFETs, oscillators, thyristors, power supply systems, voltage regulators, multistage amplifiers and power amplifiers. Laboratory fee. (3 Lec., 3 Lab.)

LOTT 1401 Introduction To Fiber Optics (4)
(This is a WECM course number. Former course prefix/number ETEL 2477.)
An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors. Laboratory fee. (3 Lec., 3 Lab.)
CETT 1445 Microprocessor (4)
(This is a WECM course number. Former course prefix/number ELET 2491.)
Suggested prerequisite: CETT 1425. An introductory course in microprocessor software and hardware; its architecture, timing sequence, operation, and programming; and discussion of appropriate software diagnostic language and tools. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1449 Digital Systems (4)
(This is a WECM course number. Former course prefix/number ELET 24n.)
Suggested prerequisite: CETT 1429. Digital Systems is a course in electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital circuits, digital-to-analog circuits, and large-scale integrated circuits. The student will evaluate the operation of digital systems while operating in correct and fault mode using various test instruments; describe the difference between a digital system and an analog system; and draw a simple block diagram of a digital computer system. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1457 Linear Integrated Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2480, ENGT 2470, or SEMI 2470.)
Suggested Prerequisite: CETT 1429. A study of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Application in computation, measurements, instrumentation, and active filtering. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2433 Digital Computer Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2479.)
Suggested prerequisite: CETT 1429. Digital computer circuits is a study of the three major component systems of a digital computer including arithmetic logic operations, RAM and ROM memory systems, and control systems. The student will explain the operation of the three basic sections of any computer system. The student will construct and troubleshoot computer circuits including arithmetic logic units, memory systems, and control systems; describe the function of the BIOS (Basic Input Output System) in a computer system; and how a computer knows what to address when first cold booted. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2435 Advanced Microprocessors (4)
(This is a WECM course number. Former course prefix/number ELET 2492.)
Suggested prerequisite: CETT 1445. An advanced course utilizing the microprocessor in control systems and interfacing. Emphasis on microprocessor hardware and implementation of peripheral interfacing. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2449 Research And Project Design (4)
(This is a WECM course number. Former course prefix/number ELET 2370.)
Suggested prerequisite: CETT 1429. Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. The student will build a project using the principles of the electrical/electronic design process; write an operations procedure of an electrical/electronic project; and demonstrate the operation of function of an electrical/electronic project. Laboratory fee. (2 Lec., 4 Lab.)

EECT 1104 Electronic Soldering (1)
(This is a WECM course number. Former course prefix/number ELET 1171.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be primarily on terminal and printed circuit board through-hole soldering. Laboratory fee. (2 Lab.)

EECT 1204 Electronic Soldering (2)
(This is a WECM course number.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be on surface-mount soldering techniques. Laboratory fee. (1 Lec., 2 Lab.)

EECT 2380 Cooperative Education - Electrical, Electronic And Communications Engineering Technology/Technician (3)
(This is a WECM course number. Former course prefix/number ELET 7471.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)
EECT 2381 Cooperative Education - Electrical, Electronic And Communications Engineering Technology/Technician (3)
(This is a WECM course number. Former course prefix/number ELET 7472.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (1 Lec., 20 Ext.)

INTC 1307 Electronic Test Equipment (3)
(This is a WECM course number. Former course prefix/number ELET 1370 or ENGT 1472.)
Suggested Prerequisite: Credit or concurrent enrollment in CETT 1405. A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques. Laboratory fee. (2 Lec., 3 Lab.)

ELECTRONICS TECHNOLOGY

AVNC 1303 Introduction To Aircraft Electronic Systems (3)
(This is a WECM course number. Former course prefix/number AVET 1370.)
This course is a study of the relationship between aircraft electronic systems and aircraft flight and navigation. Emphasis on the operation and function of the electronic systems and the operation of the systems and ramp. The student will describe the function and operation of aircraft electronic systems and operate aircraft electronic systems. Laboratory fee. (2 Lec., 2 Lab.)

AVNC 1443 Aircraft Electrical And Electronic Systems Installation (4)
(This is a WECM course number. Former course prefix/number AVET 1476.)
Suggested prerequisite: AVNC 1303. This course is a study of and practical experience in the installation of avionic systems in aircraft, mounting electronic equipment, construction and installation of electrical wiring and cables, proper use of tools, and selection of materials. The student will describe and lay out avionic systems and install avionic systems. Laboratory fee. (3 Lec., 3 Lab.)

AVNC 1453 Operational Testing Of Aircraft Electronic Systems (4)
(This is a WECM course number. Former course prefix/number AVET 1471.)
Suggested prerequisite: AVNC 1303. Topics in this course include integration of technical drawing interpretation, wiring interface checkout, and the application of ramp test equipment in common usage. Emphasis on performance of functional checks of aircraft electrical and electronic systems. The student will identify, describe, and use proper procedures and techniques for testing aircraft electronic systems. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1403 DC Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 1470.)
DC Circuits is a study of the fundamentals of direct current including Ohm's law, Kirchoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1405 AC Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 1471.)
Suggested prerequisite: CETT 1403. AC Circuits is a study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1425 Digital Fundamentals (4)
(This is a WECM course number. Former course prefix/number ELET 1473, ENGT 2471, or SEM1 1470.)
An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Laboratory fee. (3 Lec., 3 Lab.)
CETT 1429 Solid State Devices (4)
(This is a WECM course number. Former course prefix/number ELET 1472.)
Suggested prerequisite: CETT 1403 and credit or concurrent enrollment in CETT 1405. Solid State Devices is a study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bias techniques, and thermal considerations of solid state devices. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1441 Solid State Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2486.)
Suggested prerequisite: CETT 1429. A study of various semiconductor devices incorporated in circuits and their applications. Emphasis on circuit construction, measurements, and analysis. Topics will include JFETs, MOSFETs, oscillators, thyristors, power supply systems, voltage regulators, multistage amplifiers and power amplifiers. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1445 Microprocessor (4)
(This is a WECM course number. Former course prefix/number ELET 2491.)
Suggested prerequisite: CETT 1425. An introductory course in microprocessor software and hardware; its architecture, timing sequence, operation, and programming; and discussion of appropriate software diagnostic language and tools. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1449 Digital Systems (4)
(This is a WECM course number. Former course prefix/number ELET 2477.)
Suggested prerequisite: CETT 1429. Digital Systems is a course in electronics covering digital systems. Emphasis on application and troubleshooting digital systems using counters, registers, code converters, multiplexers, analog-to-digital circuits, digital-to-analog circuits, and large-scale integrated circuits. The student will evaluate the operation of digital systems while operating in correct and fault mode using various test instruments; describe the difference between a digital system and an analog system; and draw a simple block diagram of a digital computer system. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1457 Linear Integrated Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2480, ENGT 2470, or SEMI 2470.)
Suggested Prerequisite: CETT 1429. A study of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Application in computation, measurements, instrumentation, and active filtering. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2433 Digital Computer Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2479.)
Suggested prerequisite: CETT 1429. Digital computer circuits is a study of the three major component systems of a digital computer including arithmetic logic operations, RAM and ROM memory systems, and control systems. The student will explain the operation of the three basic sections of any computer system. The student will construct and troubleshoot computer circuits including arithmetic logic units, memory systems, and control systems; describe the function of the BIOS (Basic Input Output System) in a computer system; and how a computer knows what to address when first cold booted. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2435 Advanced Microprocessors (4)
(This is a WECM course number. Former course prefix/number ELET 2492.)
Suggested prerequisite: CETT 1445. An advanced course utilizing the microprocessor in control systems and interfacing. Emphasis on microprocessor hardware and implementation of peripheral interfacing. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2443 Principles Of Color Television (4)
(This is a WECM course number. Former course prefix/number ELET 2475.)
Suggested prerequisite: CETT 1429. This course covers the principles of color television receivers including signal processing circuits and provides color TV theory and hands-on experience in basic color TV service. The student will explain the principles of color television receivers; test color TV receiver circuits for proper operation and verify FCC color television parameters. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2449 Research And Project Design (4)
(This is a WECM course number. Former course prefix/number ELET 2370.)
Suggested prerequisite: CETT 1429. Principles of electrical/electronic design encompassing schematics wiring diagrams, materials lists, operating characteristics, completion schedules, and cost estimates. The student will build a project using the principles of the electrical/electronic design process; write an operations procedure of an electrical/electronic project; and demonstrate the operation of function of an electrical/electronic project. Laboratory fee. (2 Lec., 4 Lab.)
CPMT 1403 Introduction To Computer Technology (4)
(This is a WECM course number. Former course prefix/number ELET 2481.)
Suggested prerequisite: CETT 1403. This is a fundamental computer course that provides in-depth explanation of the procedures to utilize hardware and software. Emphasis is on terminology, acronyms, and hands-on activities. The student will define and recognize terms, expressions and phrases associated with computers and use advanced commands in various applications. Laboratory fee. (3 Lec., 3 Lab.)

CPMT 1447 Computer System Peripherals (4)
(This is a WECM course number. Former course prefix/number ELET 2483.)
Suggested prerequisite: CETT 1403. This course is an in-depth study of network technology with emphasis on network operating systems, network connectivity, hardware, and software. Mastery of implementation, troubleshooting, and maintenance of LAN and/or WAN network environments. The student will demonstrate skills in implicating complex network environments; utilize troubleshooting and diagnostics procedures; create a complex network with multilevel access and security; and establish and utilize procedures to provide routine maintenance. Laboratory fee. (3 Lec., 3 Lab.)

CPMT 1449 Computer Networking Technology (4)
(This is a WECM course number. Former course prefix/number ELET 2484.)
Suggested prerequisite: CETT 1403. This is a beginning course in computer networks with focus on networking fundamentals, terminology, hardware, software, and network architecture. A study of local/ wide area networking concepts and networking installations and operations Laboratory fee. (3 Lec., 3 Lab.)

CPMT 2437 Microcomputer Interfacing (4)
(This is a WECM course number. Former course prefix/number ELET 2493.)
Suggested Prerequisite: CETT 2435. An interfacing course exploring the concepts and terminology involved in interfacing the internal architecture of the microcomputer with commonly used external devices. Laboratory fee. (3 Lec., 3 Lab.)

CPMT 2445 Computer System Troubleshooting (4)
(This is a WECM course number. Former course prefix/number ELET 2482.)
Suggested prerequisite: CETT 1429. This is an interfacing course exploring the concepts and terminology involved in interfacing the internal architecture of the microcomputer with commonly used external devices. The student will determine the requirements of the device to be interfaced and select the proper scheme; and will implement the hardware and software processes to interface common external devices. Laboratory fee. (3 Lec., 3 Lab.)

EECT 1104 Electronic Soldering (1)
(This is a WECM course number. Former course prefix/number ELET 1171.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be primarily on terminal and printed circuit board through-hole soldering. Laboratory fee. (2 Lab.)

EECT 1191 Special Topics In Electrical, Electronic And Communications Engineering Technology/ Technician (1)
(This is a WECM course number. Former course prefix/number ELET 2170.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec.)

EECT 1204 Electronic Soldering (2)
(This is a WECM course number.)
The theory of tools and equipment for electronic soldering techniques. The student will select and use appropriate soldering tools and equipment, demonstrate proper soldering techniques, and practice safety procedures. Emphasis will be on surface-mount soldering techniques. Laboratory fee. (1 Lec., 2 Lab.)

EECT 1291 Special Topics In Electrical, Electronic And Communications Engineering Technology/ Technician (2)
(This is a WECM course number. Former course prefix/number ELET 2270.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 1 Lab.)
EECT 1391 Special Topics In Electrical, Electronic And Communications Engineering Technology/Technician (3)
(This is a WECM course number. Former course prefix/number ELET 2372.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 2 Lab.)

EECT 1491 Special Topics In Electrical, Electronic And Communications Engineering Technology/Technician (4)
(This is a WECM course number. Former course prefix/number ELET 2470.)
Topics in this course address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 3 Lab.)

EECT 2380 Cooperative Education - Electrical, Electronic And Communications Engineering Technology/Technician (3)
(This is a WECM course number. Former course prefix/number ELET 7471.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

EECT 2381 Cooperative Education - Electrical, Electronic And Communications Engineering Technology/Technician (3)
(This is a WECM course number. Former course prefix/number ELET 7472.)
Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (1 Lec., 20 Ext.)

EECT 2439 Communications Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2476.)
Suggested prerequisite: CETT 1429. This course is a study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. The student will describe the operation of communications receivers and transmitters; measure and troubleshoot communications systems; and describe the use of microwave receivers used in down-links in communications and the geographical regional transponder relationships used to communicate by cell phone. Laboratory fee. (3 Lec., 3 Lab.)

ELMT 2433 Industrial Electronics (4)
(This is a WECM course number. Former course prefix/number ELET 2473.)
Suggested prerequisite: CETT 1429. This course is a study of devices, circuits, and systems primarily used in automated manufacturing and/or process control including computer controls and interfacing between mechanical, electrical, electronic, and computer equipment. Presentation of programming schemes. The student will describe how electronic input and output circuits are used to control automated manufacturing and/or process systems; identify basic elements used for input, output, timing, and control; define how programmable electronic systems use input data to alter output responses; troubleshoot a representative system; and demonstrate how system operation can be altered with software programming. Laboratory fee. (3 Lec., 3 Lab.)

INTC 1307 Electronic Test Equipment (3)
(This is a WECM course number. Former course prefix/number ELET 1370 or ENGT 1472.)
Suggested Prerequisite: Credit or concurrent enrollment in CETT 1405. A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques. Laboratory fee. (2 Lec., 3 Lab.)
LOT 2340 Microwave Fundamentals (3)  
(This is a WECM course number. Former course prefix/number ELET 2371.)  
Suggested prerequisite: CETT 1429. This course is an introduction to microwave theory and applications, transmitter and receiver. The student will state the principles of operation and demonstrate the proper, safe operation of microwave signal sources: reflex klystron, backward wave oscillator (BWO), traveling wave tube (TWT), magnetron, gunn effect device, and impact diode. The student will demonstrate the use of various types of measurement devices including but not limited to: microwave power meters, voltage standing wave radio (VSWR) meters, slotted lines, frequency meters, and attenuators. The student will perform the calculation and conversion of measured values to a useful form; and verify through calculations and measurements characteristics of a transmission line and a transmission load. The student will demonstrate theory and use of the following waveguide and coaxial components given Z₀ and Z₀c: hybrid junctions, attenuators, detectors, modulators, matching stubs, and directional couplers. The student will state the principles of operation of microwave antennas, phased arrays, and lenses; and state the operating principles of the following terms: time domain reflectometer (TDR), multiplexing, and pulsed radar. (3 Lec.)

RBTC 2445 Robot Application, Set-Up And Testing (4)  
(This is a WECM course number. Former course prefix/number ELET 2471.)  
This is a capstone course that provides the student with laboratory experience in the installation, set-up, and testing of robotic cells. Topics include maintenance. The student will demonstrate familiarity with hardwiring and interfacing PLCs, robots, CNC equipment, and support equipment; troubleshoot and debug equipment to make it function in a live automated environment; and apply design techniques to maintain maximum cycle times on an automated system. Laboratory fee. (3 Lec., 3 Lab.)

SMFT 2231 RF Power Systems (2)  
(This is a WECM course number. Former course prefix/number ELET 2271.)  
Suggested prerequisite: CETT 1429. This course is a study of RF power systems and their applications in the semiconductor manufacturing industry. Topics include plasma physics, RF power amplifiers and oscillators, transmission lines, impedance matching and safety. The student will describe the applications of RF power systems in the semiconductor industry; describe hazards and required safety precautions in RF power systems; analyze the operation of power RF generators; explain the principles of resonance, filter applications, transmission line characteristics, and impedance matching in RF power systems. (2 Lec.)

ENGINE TECHNOLOGY

MTRC 1366 Practicum - Motorcycle Mechanic And Repairer (3)  
(This is a WECM course number. Former course prefix/number ETMC 1462.)  
Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (1 Lec., 20 Ext.)

MTRC 1380 Cooperative Education - Motorcycle Mechanic And Repairer (3)  
(This is a WECM course number. Former course prefix/number ETMC 7371.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

MTRC 1402 Motorcycle Tune Up (4)  
(This is a WECM course number. Former course prefix/number ETMC 1471.)  
Introduction to tune up procedures for both two and four stroke motorcycles including analysis, valve train, ignition, fuel system, and chassis service. Emphasis is on the appropriate procedures and equipment. Laboratory fee. (3 Lec., 4 Lab.)

MTRC 1405 Motorcycle Service Principles (4)  
(This is a WECM course number. Former course prefix/number ETMC 1470.)  
Principles of operation of two and four stroke motorcycle engines and their associated systems. Emphasis is on troubleshooting and analysis of faulty systems and their individual components. Laboratory fee. (3 Lec., 4 Lab.)

MTRC 1408 Motorcycle Chassis And Drive Systems (4)  
(This is a WECM course number. Former course prefix/number ETMC 1475.)  
Theory of operation, servicing procedures, and problem diagnosis of motorcycle chassis, final drive systems, wheels, brakes, frames, and suspensions with emphasis on troubleshooting for handling and ridability problems. Laboratory fee. (3 Lec., 4 Lab.)
SMER 1366 Practicum - Small Engine Mechanic And Repairer (3)
(This is a WECM course number. Former course prefix/number ETOB 1463 or ETSE 1464.)
Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (1 Lec., 20 Ext.)

SMER 1371 Service Department Operations (3)
(This is a local need course number.)
Prerequisite: Successful completion of 16 credit hours in Engine Technology courses. This course combines the study of the operations of a service department including repair orders, service scheduling, customer relations, parts department operations, PC based parts systems, and warranty policy with the performance of Capstone service projects. Laboratory fee. (1 Lec., 8 Lab.)

SMER 1380 Cooperative Education - Small Engine Mechanic And Repairer (3)
(This is a WECM course number. Former course prefix/number ETOB 7481, ETSE 7391, or ETSE 7491.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

SMER 1401 Outboard Tune-Up (4)
(This is a WECM course number. Former course prefix/number ETOB 1481.)
An introductory course in tune up procedures for both two and four stroke outboard motors including analysis, valve train, ignition, fuel, cooling, and drive systems service. Emphasis is on appropriate equipment and procedures. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1404 Outboard Service Principles (4)
(This is a WECM course number. Former course prefix/number ETOB 1480.)
Principles of operation of two- and four-stroke outboard motors and their associated systems. Emphasis is on troubleshooting and analysis of faulty systems and their individual components. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1407 Outboard Powerhead Overhaul (4)
(This is a WECM course number. Former course prefix/number ETOB 1482.)
An introductory course in overhaul procedures for two stroke outboard powerhead overhaul. Emphasis is on proper shop procedures for disassembly, inspection, servicing, and assembly of two stroke outboard powerheads. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1410 Outboard Lower Units (4)
(This is a WECM course number. Former course prefix/number ETOB 1483.)
Operation, service, troubleshooting, and overhaul of all systems of an outboard motor located below the powerhead. Emphasis on the use of proper tools and procedures when servicing the mid section, lower unit, trim and tilt systems. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1413 Outboard Electrical Systems (4)
(This is a WECM course number. Former course prefix/number ETOB 1484.)
Theory of operation and test procedures and equipment used in the diagnosis and repair of the various circuits which make up an outboard motor's electrical systems. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1416 Motorcycle Two-Stroke Engine/Transmission (4)
(This is a WECM course number. Former course prefix/number ETMC 1472.)
Overhaul procedures for two-stroke motorcycle engines and transmissions. Emphasis is on proper shop procedures for servicing the piston, cylinder, crankshaft assembly, and transmission during the course of an overhaul. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1419 Motorcycle Four-Stroke Engine/Transmission (4)
(This is a WECM course number. Former course prefix/number ETMC 1473.)
Overhaul procedures for four-stroke motorcycle engines and transmissions. Emphasis is on approved shop procedures for disassembly, assembly, component inspection, measurement, servicing, and transmission troubleshooting in transmission inspection. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1422 Motorcycle Electrical Systems (4)
(This is a WECM course number. Former course prefix/number ETMC 1474.)
Theory of operation and test procedures and equipment used in the diagnosis and repair of the various circuits which make up a motorcycle electrical system. Laboratory fee. (3 Lec., 4 Lab.)
SMER 1425 Small Engine Electrical Systems (4)
(This is a WECM course number. Former course prefix/number ETSE 1494.)
Theory of operation and test procedures and equipment used in the diagnosis and repair of the various circuits which make up a small engine electrical system. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1428 Small Engine Service Principles (4)
(This is a WECM course number. Former course prefix/number ETSE 1490.)
Principles of operation of two and four stroke small engines and their associated systems. Emphasis on troubleshooting and the analysis of faulty systems and their components. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1431 Small Engine Tune-Up (4)
(This is a WECM course number. Former course prefix/number ETSE 1491.)
Tune-up procedures for two- and four-stroke small engines including analysis, valve train, ignition fuel, starter, cutter, and safety compliance systems. Emphasis is on the use of appropriate equipment and procedures. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1434 Small Engine Two-Stroke Overhaul (4)
(This is a WECM course number. Former course prefix/number ETSE 1492.)
Overhaul procedures for two-stroke small engines as used in lawn and garden applications. Emphasis is on proper shop procedures for disassembly, inspection, servicing, and assembly of two stroke small engines and their applicable drive systems. Laboratory fee. (3 Lec., 4 Lab.)

SMER 1437 Small Engine Four-Stroke Overhaul (4)
(This is a WECM course number. Former course prefix/number ETSE 1493.)
Overhaul procedures for four-stroke small engines, transmissions, and transaxles. Emphasis is on shop procedures for disassembly, assembly, component inspection, component measurement, component servicing, transmission troubleshooting, transmission inspection, and transaxle inspection. Laboratory fee. (3 Lec., 4 Lab.)

ENGINEERING

ENGR 1201 Engineering Analysis (2)
(This is a common course number. Former course prefix/number EGR 101)
Prerequisite: Two years of high school algebra or Developmental Mathematics 0093 or demonstrated competence approved by the instructor. A mathematical scheme of analysis appropriate in engineering design is presented. Topics include natural quantities, vectors, Newton's laws, work, energy, first law of thermodynamics, information, dimensional analysis, physical modeling, compatibility, continuity, and interpretation of analytic results. Computer programming is taught and used in processing information for analysis. (2 Lec.)
(Coordinating Board Academic Approval Number 1401015129)

ENGR 1304 Engineering Design Graphics (3)
(This is a common course number. Former course prefix/number EGR 105)
Prerequisite: Engineering 1201 or Mathematics 1316 or 1375 or demonstrated competence approved by the instructor. Graphic fundamentals are presented for engineering communications and engineering design. A rational engineering design procedure is taught and computer aided design is introduced. Graphical topics include geometric construction, geometric modeling, orthographic drawing system, auxiliaries, sections, dimensions and tolerances, graphical analysis, pictorial and working drawings. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801015129)

ENGR 1305 Descriptive Geometry (3)
(This is a common course number. Former course prefix/number EGR 106)
Prerequisite: Computer Aided Design 1309 or Engineering 1304. This course provides instruction in the visualization of three dimensional structures and computer transformations of geometric models. Emphasis is on accurately representing these structures in drawings by analyzing the true relationship between points, lines, and planes. Included are the generation and classification of lines, surfaces, intersections, development, auxiliaries, and revolutions. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4801015129)
ENGR 1307 Plane Surveying (3)
(This is a common course number. Former course prefix/number EGR 205)
Prerequisites: Mathematics 1316 or 1375 and Engineering 1304 or Computer Aided Design 1470. This course focuses on plane surveying. Topics include surveying instruments, basic measuring procedures, vertical and horizontal control, error analysis, and computations. Traverse, triangulation, route alignments, centerlines, profiles, mapping, route surveying, and land surveying are also included. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 1511025129)

ENGR 2105 Electrical Engineering Laboratory (1)
(This is a common course number. Former course prefix/number EGR 206)
Prerequisite: Credit or concurrent enrollment in Engineering 2305. Various instruments are studied and used. These include the cathode ray oscilloscope, ammeters, voltmeters, ohmmeters, power supplies, signal generators, and bridges. Basic network laws, steady state and transient responses, and diode characteristics and applications are demonstrated. Computer simulation is introduced. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 4008015339)

ENGR 2270 Mechanics Of Structures (2)
(Former course prefix/number EGR 290)
Prerequisite: Mathematics 1375. This is a basic course in engineering mechanics for technology students. It covers the principles of statics and strengths of materials. Topics include force systems, equilibrium, moments, centroids, elasticity, yield, stresses and strains. Methods analysis and design of bolted and welded joints, trusses, beams, and columns are introduced. Laboratory fee. (2 Lec., 2 Lab.)

ENGR 2301 Engineering Mechanics I (3)
(This is a common course number. Former course prefix/number EGR 107)
Prerequisite: Credit or concurrent enrollment in Mathematics 2513. This course is a study of the statics of particles and rigid bodies with vector mathematics in three dimensional space. Topics include the equilibrium of forces and force systems, resultants, free body diagrams, friction, centroids and moments of inertia, virtual work, and potential energy. Distributed forces, centers of gravity, and analysis of structures, beams, and cables are also presented. (3 Lec.)
(Coordinating Board Academic Approval Number 1411015229)

ENGR 2302 Engineering Mechanics II (3)
(This is a common course number. Former course prefix/number EGR 201)
Prerequisites: Engineering 2301 and credit or concurrent enrollment in Mathematics 2414. This is a study of dynamics. Particles and rigid bodies are examined as they interact with applied forces. Both constrained and general motions are included. Space, time, mass, velocity, acceleration, work and energy, impulse, and momentum are covered. (3 Lec.)
(Coordinating Board Academic Approval Number 1411015329)

ENGR 2305 Electrical Systems Analysis (3)
(This is a common course number. Former course prefix/number EGR 204)
Prerequisite: Credit or concurrent enrollment in Mathematics 2414. Electrical science is introduced. Included are fundamental electrical systems and signals. Basic concepts of electricity and magnetism with mathematical representation and computation are also covered. (3 Lec.)
(Coordinating Board Academic Approval Number 4008015339)
ENGR 2332 Engineering Mechanics Of Materials (3)
(This is a common course number. Former course prefix/number EGR 202)
Prerequisites: Engineering 2301 and credit or concurrent enrollment in Mathematics 2414. Simple structural elements are studied. Forces, deformation, material properties, the concepts of stress, strain, and elastic properties are presented. Analysis of thin walled vessels, members loaded in tension, torsion, bending and shear, combined loadings, and stability conditions are included. Behavioral phenomena such as fracture, fatigue, and creep are introduced. (3 Lec.)

ENGR 2370 Computer Methods in Engineering (3)
(Former course prefix/number EGR 207)
Prerequisite: Credit or concurrent enrollment in Mathematics 2513 and demonstrated ability to program in a computer language approved by the instructor. Fundamental methods of numerical analysis with computer programming applications are presented. Topics include computer programming, recursion formulas, successive approximations, error analysis, nonlinear equations, and systems of linear equations and matrix methods. Probabilistic models, interpolations, determination of parameters, numerical integration, and solution of ordinary differential equations are also covered. (3 Lec.)

ENGINEERING TECHNOLOGY

CETT 1331 Technical Programming (3)
(This is a WECM course number. Former course prefix/number ENGT 1473.)
Suggested Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. Introduction to a high level programming language such as BASIC, PASCAL, or "C". Topics include structured programming and problem solving as they apply to technical applications. Laboratory fee. (2 Lec., 4 Lab.)

CETT 1403 DC Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 1471.)
Suggested prerequisite: CETT 1403. DC Circuits is a study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1425 Digital Fundamentals (4)
(This is a WECM course number. Former course prefix/number ELET 1475, ENGT 2471, or SEMI 1470.)
An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1429 Solid State Devices (4)
(This is a WECM course number. Former course prefix/number ELET 1472.)
Suggested prerequisite: CETT 1403 and credit or concurrent enrollment in CETT 1405. Solid State Devices is a study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bias techniques, and thermal considerations of solid state devices. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1457 Linear Integrated Circuits (4)
(This is a WECM course number. Former course prefix/number ELET 2480, ENGT 2470, or SEMI 2470.)
Suggested Prerequisite: CETT 1429. A study of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Application in computation, measurements, instrumentation, and active filtering. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2337 Microcomputer Control (3)
(This is a WECM course number. Former course prefix/number ENGT 2475 or SEMI 2371.)
Suggested Prerequisite: CETT 1425. A study of microprocessors and microcomputers with an emphasis on embedded controllers for industrial and commercial applications. Topics include RAM, ROM and input/output (I/O) interfacing. Introduction to programming. Laboratory fee. (2 Lec., 2 Lab.)
DFTG 1309 Basic Computer-Aided Drafting (3)
(This is a WECM course number. Former course prefix/number CADD 2380.)
An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating and scaling objects, adding text and dimensions, using layers coordinating systems; as well as input and output devices. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 1405 Technical Drafting (4)
(This is a WECM course number. Former course prefix/number CADD 1470.)
Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2312 Technical Illustration (3)
(This is a WECM course number. Former course prefix/number CADD 2372 or ENGT 1272.)
Suggested Prerequisite: DFTG 1309. Topics include pictorial drawing including isometrics, obliques, perspectives, charts and graphs; shading and transfer lettering; and use of different media. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2340 Solid Modeling/Design (3)
(This is a WECM course number. Former course prefix/number CADD 2393.)
A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Laboratory fee. (2 Lec., 4 Lab.)

DFTG 2344 Strength of Materials (3)
(This is a WECM course number. Former course prefix/number DFT 209.)
The study of internal effects of forces acting upon elastic bodies and the resulting changes in form and dimensions, including units on stress, shear, bending moments, and simple beam design. (2 Lec., 4 Lab.)

DFTG 2350 Geometric Dimensioning and Tolerancing (3)
(This is a WECM course number. Former course prefix/number CADD 2397.)
An introduction to geometric dimensioning and tolerancing, according to ANSI Y14.5 standards. Application of various geometric dimensions and tolerances to engineering drawings. Emphasis on cumulative effects on part function, gauging equipment, and inspection procedures. Laboratory fee. (2 Lec., 4 Lab.)

ENTC 1191 Special Topics In Engineering Technology/Technician, General (1)
(This is a WECM course number. Former course prefix/number ENGT 2170.)
Topics address recently identified current events; skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec.)

ENTC 1291 Special Topics In Engineering Technology/Technician, General (2)
(This is a WECM course number. Former course prefix/number ENGT 2273.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (2 Lec.)

ENTC 1301 Robotics I (3)
(This is a WECM course number. Former course prefix/number ENGT 2370.)
Suggested Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. An introduction to Robots/Automation. Topics include history, terminology, classification of robots, basic components, control systems, AC and hydraulic servomechanisms, programming, sensors, types of drive, end-of-arm tooling, end effectors, safety and design procedures. Laboratory fee. (2 Lec., 3 Lab.)

ENTC 1380 Cooperative Education - Engineering Technology/Technician, General (3)
(This is a WECM course number. Former course prefix/number SEMI 7371.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

ENTC 1391 Special Topics In Engineering Technology/Technician, General (3)
(This is a WECM course number. Former course prefix/number ENGT 2372.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 2 Lab.)

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ENTC 1445 Fluid Power (4)
(This is a WECM course number. Former course prefix/number ELET 2472 or ENGT 1471.)
Suggested Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. A study of hydraulic and pneumatic systems including a review of schematic symbols, mechanical components, and operating principles. Interpretation of fluid power schematics and performance of calculations required to select components. Laboratory fee. (3 Lee., 3 Lab.)

ENTC 1491 Special Topics In Engineering Technology/Technician, General (4)
(This is a WECM course number. Former course prefix/number ENGT 2476.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lee., 4 Lab.)

ENTC 2301 Robotics II (3)
(This is a WECM course number. Former course prefix/number ENGT 2371.)
Suggested Prerequisite: ENTC 1301. The study of industrial robots, programming languages, and software integrated to develop work cells and complete robotic systems. Topics include automation basics, interfacing, safety, and design procedures. Laboratory fee. (2 Lee., 3 Lab.)

ENTC 2380 Cooperative Education - Engineering Technology/Technician, General (3)
(This is a WECM course number. Former course prefix/number ENGT 7371 or ENGT 7471 or SEMI 7372.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lee., 20 Ext.)

ENTC 2435 Computer Integrated Manufacturing (4)
(This is a WECM course number. Former course prefix/number ENGT 2473.)
Suggested Prerequisite: ENTC 2301. Concepts of CIM are introduced. Emphasis on using computers to automate a total manufacturing system. Hands-on experiences integrating CAD/CAM, robotics, fluid power, CNC machines, vision systems, recognition equipment, PLCs and conveyor systems. Laboratory fee. (3 Lee., 3 Lab.)

INMT 1343 CAD-CAM (3)
(This is a WECM course number. Former course prefix/number ENGT 2270.)
Computer-assisted applications in integrating engineering graphics and manufacturing. Emphasis on the conversion of a working drawing using CAD-CAM software and related input and output devices to translate into machine code. Laboratory fee. (2 Lec., 4 Lab.)

INMT 1447 Industrial Automation (4)
(This is a WECM course number. Former course prefix/number SEMI 1471.)
Suggested Prerequisite: CETT 1405. A study of the applications of industrial automation systems including identification of system requirements, equipment integration, motors, controllers, and sensors. Coverage of set-up, maintenance, and testing of the automated systems. Laboratory fee. (3 Lee., 3 Lab.)

INTC 1307 Electronic Test Equipment (3)
(This is a WECM course number. Former course prefix/number ELET 1370 or ENGT 1472.)
Suggested Prerequisite: Credit or concurrent enrollment in CETT 1405. A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques. Laboratory fee. (2 Lec., 3 Lab.)

MCHN 1352 Intermediate Machine Shop I (3)
(This is a WECM course number. Former course prefix/number ENGT 1371.)
Operation of drills, milling machines, lathes, and power saws. Introduction to precision measuring techniques. Includes operation and programming of computer numerical control (CNC) machines. Laboratory fee. (1 Lee., 6 Lab.)

QCTC 1343 Quality Assurance (3)
(This is a WECM course number. Former course prefix/number ELET 2272 or ENGT 1271.)
Suggested Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. Information on quality assurance principles and applications; designed to introduce the student to the quality assurance profession. (3 Lee.)
ENGLISH

(Also see Developmental Reading and Developmental Writing.) Additional instruction in writing and reading is available through the Learning Skills Center.

ENGL 1111 Creative Writing (1)
(This is a common course number. Former course prefix/number ENG 111)
This course is an imaginative writing workshop. It may include fiction, non-fiction, poetry, or drama. (1 Lee.)

ENGL 1301 Composition I (3)
(This is a common course number. Former course prefix/number ENG 101)
Prerequisite: Developmental Reading 0093 and Developmental Writing 0093 or meet TASP/Alternative Assessment Standard in Reading and Writing. This course focuses on student writing. It emphasizes reading and analytical thinking and introduces research skills. Students practice writing for a variety of audiences and purposes. (3 Lee.)

ENGL 1302 Composition II (3)
(This is a common course number. Former course prefix/number ENG 102)
Prerequisite: English 1301 and TASP/Alternative Assessment Standard in Reading and Writing must be met. In this course students refine the writing, research, and reading skills introduced in English 1301. A related goal is the development of critical thinking skills. Writing assignments emphasize argumentation and persuasion. Students will also write a formal research paper. (3 Lec.)

ENGL 2307 Creative Writing (3)
(This is a common course number. Former course prefix/number ENG 209)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. The writing of fiction, creative non-fiction, poetry or drama is the focus of this course. Included are the short story, poetry, and short drama. (3 Lec.)

ENGL 2308 Creative Writing (3)
(This is a common course number. Former course prefix/number ENG 211)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. Advanced experience in the techniques of imaginative writing. May include fiction, non-fiction, poetry, or drama. (3 Lec.)

ENGL 2311 Technical Writing (3)
(This is a common course number. Former course prefix/number ENG 210)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. The technical style of writing is introduced. Emphasis is on the writing of technical papers, reports, proposals, progress reports, and descriptions. (3 Lec.)

English In The Sophomore Year

ENGL 2321, 2322, 2323, 2326, 2327, 2328, 2331, 2332, 2333, 2370, and 2371 are independent units of three credit hours each. Any one of these courses will satisfy DCCCD degree requirements in sophomore English.

ENGL 2321 British Literature (3)
(This is a common course number. Former course prefix/number ENG 212)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes selections in British Literature organized by movements, schools, periods, or themes. (3 Lec.)

ENGL 2322 British Literature (3)
(This is a common course number. Former course prefix/number ENG 201)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes significant works of British and Commonwealth writers from their beginnings through the 18th century. (3 Lec.)

ENGL 2323 British Literature (3)
(This is a common course number. Former course prefix/number ENG 202)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes significant works of British and Commonwealth writers from the 18th century to the present. (3 Lec.)

ENGL 2326 American Literature (3)
(This is a common course number. Former course prefix/number ENG 213)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes selections in American Literature organized by movements, schools, periods, or themes. (3 Lec.)
ENGL 2327 American Literature (3)
(This is a common course number. Former course prefix/number ENG 205)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes significant works of American writers from the 17th century to the 19th century. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015135)

ENGL 2328 American Literature (3)
(This is a common course number. Former course prefix/number ENG 206)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes significant works of American writers from the 19th century to the present. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015135)

ENGL 2331 World Literature (3)
(This is a common course number. Former course prefix/number ENG 214)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes selections in World Literature organized by movements, schools, periods, or themes. Course descriptions are available each semester prior to registration. (3 Lec.)
(Coordinating Board Academic Approval Number 2307015135)

ENGL 2332 World Literature (3)
(This is a common course number. Former course prefix/number ENG 203)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes significant works representing a variety of cultures from the ancient world to approximately 1600 C.E. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015235)

ENGL 2333 World Literature (3)
(This is a common course number. Former course prefix/number ENG 204)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes significant works representing a variety of cultures from approximately 1600 C.E. to the present. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015235)

ENGL 2370 Studies In Literature (3)
(Former course prefix/number ENG 215)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes selections in literature organized by genre, period, or geographical region. Course descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015335)

ENGL 2371 Studies In Literature (3)
(Former course prefix/number ENG 216)
Prerequisite: English 1301, English 1302 and TASP/Alternative Assessment Standards in Reading and Writing must be met. This course includes selections in literature organized by theme, interdisciplinary content or major author. Course titles and descriptions are available each semester prior to registration. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 2303015335)

ENGLISH AS A SECOND LANGUAGE

The English As A Second Language ESL credit curriculum is designed to develop a student's pre-academic language proficiency in the areas of listening, speaking, reading, and writing. The plan of study consists of sixteen courses divided into four proficiency levels and four skill areas (Listening-Speaking, Reading, Writing, and Grammar). The credit curriculum is designed to interlace both with other ESL programs and with developmental studies or college level programs on each campus. A student enters this program by taking an English placement test and then by being advised by a specially trained ESL academic advisor.

ESOL 0031 - ESOL 0034 (Listening-Speaking)
These courses prepare students to communicate orally in both public and academic environments. Emphasis is placed on developing language functions, pronunciation, and listening skills, and improving social and intercultural communication skills. Activities range from one-on-one conversation and brief descriptions to formal oral presentations and debates.

ESOL 0041 - ESOL 0044 (Reading)
These courses engage students in reading material from daily experience and prepare them for college reading tasks. Each course instructs students in reading skills, vocabulary development, critical thinking skills, and the use of resources.
ESOL 0051 - ESOL 0054 (Writing)
These courses are designed to help students increase fluency and build confidence in writing. The courses focus on writing as a process. Through inventing, drafting, and revising, students write for specific audiences and purposes.

ESOL 0061 - ESOL 0064 (Grammar)
These courses are designed to complement the ESOL 0051-0054 writing series. They provide instruction and practice with discrete grammar points necessary for effective writing.

INGLES COMO SEGUNDO IDIOMA

El programa de crédito academico de Ingles Como Segundo Idioma ESL esta diseñado para desarrollar el dominio del idioma pre-academico del estudiante en las areas de escuchar, hablar, leer y escribir. El plan de estudio consiste en dieciseis cursos divididos en cuatro niveles de dominio y cuatro areas de habilidades (Escuchar/Hablar, Lectura, Escritura y Gramatica). El programa de crédito academico esta disenado para complementar otros programas de ESL y con los estudios de desarrollo o programas de nivel universitario de cada campus. El estudiante comienza este programa al tomar un examen de clasificacion y despues de una entrevista individual con un asesor academico entrenado especialmente en ESL.

ESOL 0031 - ESOL 0034 (Escuchar y Conversar)
Estos cursos preparan al alumno para comunicarse con confianza en situaciones sociales y academicas. Se desarrollan las varias funciones del lenguaje, se mejora la pronunciacion y comprension auditiva y se practica la comunicacion academica y transcultural. Las actividades didacticas incluyen describir lugares y objetos, proyectos en grupo, presentaciones orales y debates formales.

ESOL 0041 - ESOL 0044 (Lectura)
Estos cursos permiten a los estudiantes el acceso a material de lectura de la vida diaria y los prepara para tareas de lectura academica. Cada curso instruye a los estudiantes en habilidades de lectura, desarrollo de vocabulario, pensar en forma critica y el uso de los varios recursos disponibles en la institucion.
ESOL 0034 ESL Academic Speaking (3)
(Former course prefix/number ESL 034)
This course stresses academic speaking skills. Students learn formal presentation techniques as they defend a point of view and participate in seminars, panels, and debates. Formal rhetorical skills such as cause/effect, process, and summary will be practiced. The course will emphasize the value of cultural diversity. (Pronunciation skills, including stress and intonation, will continue to be refined with focused effort on areas of need through monitoring of oral production.) (3 Lec.)
(Coordinating Board Academic Approval Number 3201085535)

ESOL 0041 ESL Reading (3)
(Former course prefix/number ESL 041)
This course focuses on language development through reading activities. It includes reading comprehension, vocabulary building, study skills techniques, and intercultural sharing. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0042 ESL Reading (3)
(Former course prefix/number ESL 042)
This course continues language development through reading comprehension and vocabulary building. It introduces paragraph organization, idiom study, and adapting reading rate for different purposes. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0043 ESL Reading (3)
(Former course prefix/number ESL 043)
This course includes specific reading comprehension skills, reading efficiency strategies, critical thinking skills, vocabulary expansion, and the use of campus resources such as labs and libraries. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0044 ESL Reading (3)
(Former course prefix/number ESL 044)
This course is designed to build on skills taught in previous reading classes but with a more academic emphasis. Students are taught reading skills and critical thinking skills as they relate to academic topics and to literature. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085635)

ESOL 0045 Developmental Reading for Non-Native Speakers (1)
(Former course prefix/number ESL 045)
This course provides individualized instruction in order to fulfill the TASP remediation requirement for reading. The content will include a review of reading comprehension, vocabulary development and critical thinking skills. This course is only open to students whose first language is not English. (1 Lec.)
(Coordinating Board Academic Approval Number 3201085435)

ESOL 0051 ESL Writing (3)
(Former course prefix/number ESL 051)
This course stresses the creation of sentences and groups of sentences. It also introduces basic spelling rules and vocabulary development. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0052 ESL Writing (3)
(Former course prefix/number ESL 052)
This course introduces the development of controlled and guided paragraphs using a variety of organizational structures and stresses logic patterns of English. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0053 ESL Writing (3)
(Former course prefix/number ESL 053)
This course stresses the process of paragraph writing and the characteristics of effective paragraph structure. It also introduces modes of discourse such as description, cause-effect, and comparison-contrast. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0054 ESL Writing (3)
(Former course prefix/number ESL 054)
This course emphasizes modes of discourse in expository writing for academic purposes. Particular attention is given to improving unity, coherence, transition, and style as students progress to multi-paragraph compositions. Paraphrasing and summarizing are also introduced. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0055 ESL Writing (1)
(Former course prefix/number ESL 055)
This course provides individualized instruction in order to fulfill the TASP remediation requirement for writing. Content will include a review of single and multi-paragraph compositions, sentence structure, and edited American usage. This course is open only to students whose first language is not English. (1 Lec.)
(Coordinating Board Academic Approval Number 3201085435)

ESOL 0061 ESL Grammar (3)
(Former course prefix/number ESL 061)
This course introduces the basic aspects of English grammar needed to write simple and compound sentences. It includes the study of basic verb tenses, parts of speech, subject-verb agreement, and question formation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)
ESOL 0062 ESL Grammar (3)
(Former course prefix/number ESL 062)
This course reviews basic elements of English grammar introduced in ESOL 0061 and introduces grammar points necessary for writing controlled paragraphs. It includes further study of verb tenses, parts of speech, and question formation and introduces two-word verbs, modals, gerunds, and infinitives. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0063 ESL Grammar (3)
(Former course prefix/number ESL 063)
This course reviews grammar points studied in ESOL 0061 and ESOL 0062 and introduces elements necessary for students to write effective one-paragraph essays. It continues the study of verb tenses, parts of speech, and modals and introduces adverb, adjective, and noun clauses. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

ESOL 0064 ESL Grammar (3)
(Former course prefix/number ESL 064)
This course reviews grammar points studied in ESOL 0061, ESOL 0062, and ESOL 0063 and analyzes complex elements of those points. In addition, it introduces passive voice and conditional sentences. (3 Lec.)
(Coordinating Board Academic Approval Number 3201085735)

FASHION DESIGN

FSHD 1217 Apparel Computer Systems (2)
(This is a WECM course number. Former course prefix/number PDDD 2370.)
Prerequisites: FSHN 1319 and concurrent enrollment in FSHN 1449 or consent of instructor. An introduction to apparel computer systems used in wholesale and retail fashion businesses. Applications demonstrated include computer-aided garment and textile design, fashion illustration, pattern making, pattern grading, marker making, newsletters, brochures, advertisements, and catalogs. Laboratory fee. (1 Lec., 3 Lab.)

FSHD 1218 Apparel Computer Systems (2)
(This is a WECM course number. Former course prefix/number PDDD 2372.)
Prerequisites: FSHD 1217 and concurrent enrollment in FSHN 2432 or consent of instructor. A continuation of FSHD 1217. An introduction to apparel computer systems used in wholesale and retail fashion businesses. Applications demonstrated include computer-aided garment and textile design, fashion illustration, pattern-making, pattern grading, marker making, newsletters, brochures, advertisements, and catalogs. Laboratory fee. (1 Lec., 3 Lab.)

FSHD 1322 Fashion Sketching (3)
(This is a WECM course number. Former course prefix/number DESI 1372.)
Fundamentals of quick sketching to communicate design ideas. Instruction in drawing the male and female fashion figure. Emphasis on simple methods for making quick sketches to illustrate style information. Laboratory fee. (2 Lec., 4 Lab.)

FSHD 1324 Ready-to-Wear Construction (3)
(This is a WECM course number. Former course prefix/number DESI 1170.)
Fundamentals of mass production of apparel focusing on the operation of industrial sewing and pressing equipment. Survey of materials selection and construction techniques used at all price levels of mass produced apparel. Introduction to industry seam allowances. Identification of differences between ready-to-wear and couture construction. Laboratory fee. (2 Lec., 4 Lab.)

FSHD 1325 Basic Women's Tailoring (3)
(This is a WECM course number. Former course prefix/number DESI 1171.)
Prerequisite: FSHD 1324. An introduction to tailoring women's apparel including instruction in pattern alterations; assembling women's jackets skirts, and pants; and fitting and alteration procedures. Fundamentals of sewing machine operations, fabric preparation and cutting, machine and hand sewing techniques, and pressing proficiencies. Laboratory fee. (2 Lec., 4 Lab.)

FSHD 1391 Special Topics in Fashion Design and Illustration (3)
(This is a WECM course number. Former course prefix/number APPD 2370.)
Prerequisite: Sophomore standing or demonstrated competence approved by instructor, FSHN 1319, FSHD 1324. The principles of good design for mass produced apparel are studied, especially as they apply to structural and decorative design. Careful attention is given to fabric selection and design. Laboratory fee. (2 Lec., 4 Lab.)

FSHD 2205 Draping (2)
(This is a WECM course number. Former course prefix/number DESI 1171.)
Prerequisite: FSHN 1317. A study of three dimensional fashion design conceptualization by draping in muslin or fashion fabric directly on the dress form. Skill development in observing grain of fabric, identifying drapable fabrics, and creating design suitable for draping. Presentation of major fashion designers' draping techniques. Laboratory fee. (1 Lec., 2 Lab.)
FSHD 2241 Pattern Grading (2)
(This is a WECM course number. Former course prefix/number DESI 1172.)
Prerequisite: FSHN 1317. Instruction in sizing patterns larger and smaller for the mass production of the apparel. A study of 1", 1 1/2" and 2" and S-M-L-XL grade rules and their applications. Skill development in grading basic and fashion patterns with the ruler, the grading machine, and the computer. Laboratory fee. (1 Lec., 2 Lab.)

FSHD 2343 Fashion Collection Design (3)
(This is a WECM course number. Former course prefix/number APPD 2271.)
Advanced concepts in designing a collection of marketable apparel. Instruction in developing a design work board for specific target market and selecting the most marketable ideas for the collection. Emphasis on resource development, fabric selection, estimating wholesale costs, and initial pattern and garment production. Laboratory fee. (2 Lec., 2 Lab.)

FSHD 2344 Fashion Collection Production (3)
(This is a WECM course number. Former course prefix/number APPD 2371.)
Prerequisite: FSHD 2343 and FSHD 1391. A continuation of the Fashion Collection Design course (FSHD 2343). Emphasis on production, costing, and marketing a cohesive collection of fashion apparel. Instruction in completing production patterns for all collection garments. Laboratory fee. (2 Lec., 4 Lab.)

FSHN 1123 Introduction to Mass Production (1)
(This is a WECM course number. Former course prefix/number DESI 1173.)
An introduction to mass production, marketing, and merchandising in the fashion industry. (1 Lec.)

FSHN 1301 Textiles (3)
(This is a WECM course number. Former course prefix/number DESI 1370 or DESI 1371.)
A general study of textiles with emphasis on factors that affect the hand, appearance, and performance in clothing use. Examination of the properties of natural and man-made fibers, how yarn is formed, methods of production, and the properties of a wide variety of fabrics. Application of textiles used in the apparel industry. Laboratory fee. (2 Lec., 4 Lab.)

FSHN 1309 History of Costume Through the 18th Century (3)
(This is a WECM course number. Former course prefix/number DESI 2371.)
Traces the development of garments from the earliest times through the 18th Century. Emphasis on customs which affect styles. (3 Lec.)

FSHD 2341 Pattern Grading (2)
(This is a WECM course number. Former course prefix/number DESI 2372.)
Prerequisite: FSHN 1317. Instruction in sizing patterns larger and smaller for the mass production of the apparel. A study of 1", 1 1/2" and 2" and S-M-L-XL grade rules and their applications. Skill development in grading basic and fashion patterns with the ruler, the grading machine, and the computer. Laboratory fee. (1 Lec., 2 Lab.)

FSHN 1310 History of Costume: 18th Century to Present (3)
(This is a WECM course number. Former course prefix/number DESI 2372.)
Traces the development of garments from the 18th Century to the present day. Emphasis on customs which affect styles. (3 Lec.)

FSHN 1313 Basic Color Theory and Application (3)
(This is a WECM course number. Former course prefix/number DESI 1370.)
Principles of color theory including the effect of light on color and mixing color pigment in opaque media. Laboratory fee. (2 Lec., 4 Lab.)

FSHN 1317 Pattern Drafting I (3)
(This is a WECM course number. Former course prefix/number PDDD 1370.)
Concurrent enrollment in FSHD 1324. Principles of drafting and draping basic collars, skirts, bodices and sleeves. Includes cutting out garments. Laboratory fee. (2 Lec., 4 Lab.)

FSHN 1318 Pattern Drafting II (3)
(This is a WECM course number. Former course prefix/number PDDD 1371.)
Prerequisite: FSHN 1317. A continuation of Pattern Drafting I. Emphasis on drafting and draping basic patterns and garment construction. Laboratory fee. (2 Lec., 4 Lab.)

FSHN 1319 Pattern Drafting III (3)
(This is a WECM course number. Former course prefix/number PDDD 1372.)
Prerequisites: FSHN 1317 and FSHN 1318. Develops techniques for drafting and draping patterns for apparel. Includes creation and construction of original designs. Laboratory fee. (2 Lec., 4 Lab.)

FSHN 1449 Intermediate Pattern Drafting (4)
(This is a WECM course number. Former course prefix/number PDDD 2371.)
Prerequisites: FSHN 1317, FSHN 1318, FSHN 1319 and FSHD 1324. Intermediate techniques for drafting and draping patterns. Emphasis on computer drafting of patterns. Laboratory fee. (2 Lec., 6 Lab.)
FSHN 2380 Cooperative Education – Commercial
Garment and Apparel Worker (3)
(This Is a WECM course number. Former course prefix/number
PDDD 7371.)
Prerequisite: FSHN 1317. Career related activities
encountered in the student's area of specialization are
offered through a cooperative agreement between the
college, employer, and student. Under supervision of
the college and the employer, the student combined
classroom learning with work experience. Directly
related to a technical discipline, specific learning
objectives guide the student through the paid work
experience. This course may be repeated if topics and
learning outcomes vary. (1 Lec., 15 Ext.)

FSHN 2432 Advanced Pattern Drafting (4)
(This Is a WECM course number. Former course prefix/number
PDDD 2374.)
Prerequisites: FSHN 1217, FSHN 1325, FSHN 1449,
and concurrent enrollment in FSHN 1218. Advanced
techniques for drafting and draping patterns. Emphasis
on computer pattern design. Laboratory fee.
(2 Lec., 6 Lab.)

FASHION MARKETING

(See Marketing Careers)

FOOD AND HOSPITALITY SERVICE

CULA 1301 Basic Food Preparation (3)
(This Is a WECM course number. Former course prefix/number
FHSV 1377.)
A study of the fundamental principles of food preparation
and cookery to include Brigade System, cooking
techniques, material handling, heat transfer, sanitation,
safety, nutrition, and professionalism. The student will
discuss and prepare various stocks, sauces, soups, fruit,
vegetables, starches, sandwiches, salads and dressings.
Laboratory fee. (2 Lec., 4 Lab.)

CULA 1305 Sanitation and Safety (3)
(This Is a WECM course number. Former course prefix/number
FHSV 1379.)
A study of personal cleanliness; sanitary practices in
food preparation; causes, investigation, control of illness
cau sed by food contamination (Hazard Analysis Critical
Control Points); and workplace safety standards.
Laboratory fee. (3 Lec., 1 Lab.)

CULA 1364 Practicum (or Field Experience) -
Culinary Arts/Chef Training (3)
(This Is a WECM course number.)
Practical general training and experiences in the
workplace. The college with the employer develops and
documents an individualized plan for the student. The
plan relates the workplace training and experiences to
the student's general and technical course of study. The
guided external experiences may be for pay or no pay.
This course may be repeated if topics and learning
outcomes vary. (21 Ext.)

CULA 1409 Garde Manger (4)
(This Is a WECM course number. Former course prefix/number
FHSV 2375.)
Prerequisite: CULA 2331. A study of specialty foods and
garnishes. Emphasis on design, techniques, and display
of fine foods. Students will learn preparations in the cold
kitchen to include salads, appetizers, cold sauces, and
cold buffet display principles. Laboratory fee. (2 Lec., 4
Lab.)

CULA 1441 American Regional Cuisine (4)
(This Is a WECM course number. Former course prefix/number
FHSV 2470.)
Prerequisite: CULA 2331. A study of the development
of regional cuisine's in the United States with emphasis
on the similarities in production and service systems.
Application of skills to develop, organize, and build a
portfolio of recipe strategies and production systems.
Students will work in groups to plan, execute and
evaluate a weekly meal served to the public. Focus will
be on menu and production planning, as well as cost
analysis. Laboratory fee. (3 Lec., 5 Lab.)

CULA 1445 International Cuisine (4)
(This Is a WECM course number. Former course prefix/number
FHSV 2471.)
Prerequisite: CULA 2331. The study of classical cooking
skills associated with the preparation and service of
international and ethnic cuisine's. Topics include
similarities between food production systems used in the
United States and other regions of the world. Students
will work in groups to plan, execute and evaluate a
weekly meal served to the public. Focus will be on
menu and production planning, as well as cost analysis.
Laboratory fee. (3 Lec., 5 Lab.)

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CULA 2302 Saucier (3)
(This is a WECM course number. Former course prefix/number FHSV 2376.)
Prerequisite: CULA 2331. Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Students will learn classical preparations and butchering skills in addition to plate presentation and design. Emphasis will be on alternative varieties of meats, poultry, game, and seafood. Laboratory fee. (2 Lec., 4 Lab.)

CULA 2331 Advanced Food Preparation (3)
(This is a WECM course number. Former course prefix/number FHSV 1378.)
Prerequisite: CULA 1301. Reinforces the course material of Intermediate Food Preparation. Topics include the concept of pre-cooked food items and the preparation of canapes, hors d’oeuvres, and breakfast items. Meat, seafood, and poultry preparation, baking and menu planning are also included. The student will discuss and review Basic Food Preparation. WECM intermediate food preparation topics are covered in Basic and Advanced Food Preparation at El Centro College. Laboratory fee. (2 Lec., 4 Lab.)

CULA 2341 Advanced Pastry/Culinary Competition (3)
(This is a WECM course number. Former course prefix/number FHSV 2371 and FHSV 2381.)
Prerequisite: CULA 1409 or PSTR 2331. Skill development for culinary competition by offering advanced experience in salon presentations as well as hot food competition. Laboratory fee. (2 Lec., 4 Lab.)

CULA 2364 Practicum (or Field Experience) - Culinary Arts/Chef Training (3)
(This is a WECM course number.)
Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates to workplace training and experiences to the student’s general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (22 Ext.)

FDNS 1391 Special Topics in Foods and Nutrition Studies, General (3)
(This is a WECM course number. Former course prefix/number FHSV 2379 and FHSV 2380.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 1 Lab.)

HAMG 1321 Introduction to the Hospitality Industry (3)
(This is a WECM course number. Former course prefix/number FHSV 1370.)
Introduction to the elements of the hospitality industry. Laboratory fee. (3 Lec., 1 Lab.)

HAMG 1340 Hospitality Legal Issues (3)
(This is a WECM course number. Former course prefix/number FHSV 2373.)
A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. Laboratory fee. (3 Lec., 1 Lab.)

HAMG 2307 Hospitality Marketing and Sales (3)
(This is a WECM course number. Former course prefix/number FHSV 2372.)
Identification of the core principles of marketing and their impact on the hospitality industry. Laboratory fee. (3 Lec., 1 Lab.)

IFWA 1371 Organization and Management (3)
(This is a local need course number. Former course prefix/number FHSV 1372)
The organizational structure of various types of group care institutions is studied. Administration, tools of management, budget, and cost analysis are emphasized. (3 Lec., 1 Lab.)

PSTR 1191 Special Topics in Baker/Pastry Chef (1)
(This is a WECM course number. Former course prefix/number FHSV 2170.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 1 Lab.)

PSTR 1206 Cake Decorating I (2)
(This is a WECM course number. Former course prefix/number FHSV 2271.)
Introduction to skills, concepts and techniques of cake decorating. Laboratory fee. (1 Lec., 3 Lab.)

PSTR 1207 Cake Decorating II (2)
(This is a WECM course number. Former course prefix/number FHSV 2272.)
Prerequisite: PSTR 1206. A course in decoration of specialized and seasonal products. Laboratory fee. (1 Lec., 3 Lab.)
PSTR 1291 Special Topics in Baker/Pastry Chef (2)
(This is a WECM course number. Former course prefix/number FHSV 2382.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 1 Lab.)

PSTR 1301 Fundamentals of Baking (3)
(This is a WECM course number. Former course prefix/number FHSV 1383.)
Fundamentals of baking including dough, quick breads, pies, cakes, cookies, tarts, and doughnuts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the use of proper flours. Laboratory fee. (2 Lec., 4 Lab.)

PSTR 1305 Breads and Rolls (3)
(This is a WECM course number. Former course prefix/number FHSV 1384.)
Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products. The student will identify and explain baking terms, ingredients, equipment, and tools; scale and measure ingredients; convert and cost recipes; safely operate baking equipment and tools; and prepare yeast and quick breads and rolls to a commercially acceptable standard. Laboratory fee. (2 Lec., 4 Lab.)

PSTR 1310 Pies, Tarts, Teacakes and Cookies (3)
(This is a WECM course number. Former course prefix/number FHSV 1385.)
Prerequisite: PSTR 1301 or PSTR 1305. Focus on preparation of American and European style pie and tart fillings and dough, cookies, teacakes, custard and batters. Instruction in finishing and presentation techniques. Laboratory fee. (2 Lec., 4 Lab.)

PSTR 1312 Laminated Dough, Pate a Choux, and Donuts (3)
(This is a WECM course number. Former course prefix/number FHSV 1386.)
Prerequisite: PSTR 1301 or PSTR 1305. Focus on preparation of laminated dough's to include puff pastry, croissant, and Danish and a variety of pate a choux (eclair paste) products and donuts. Fillings and finishing techniques included. Laboratory fee. (2 Lec., 4 Lab.)

PSTR 1371 Bakery Operations and Management (3)
(This is a local need course number. Former course prefix/number FHSV 1371.)
Introduction to management, marketing, supervision and sanitation principles required in retail and wholesale bakery operations. Laboratory fee. (3 Lec., 1 Lab.)

PSTR 1391 Special Topics in Baker/Pastry Chef (3)
(This is a WECM course number. Former course prefix/number FHSV 2383.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

PSTR 2331 Advanced Pastry Shop (3)
(This is a WECM course number. Former course prefix/number FHSV 2377.)
A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Laboratory fee. (2 Lec., 4 Lab.)

RSTO 1191 Special Topics in Food and Beverage/Restaurant Operations Manager (1)
(This is a WECM course number. Former course prefix/number FHSV 2170.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 1 Lab.)

RSTO 1291 Special Topics in Food and Beverage/Restaurant Operations Manager (2)
(This is a WECM course number. Former course prefix/number FHSV 2270.)
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 1 Lab.)

RSTO 1301 Beverage Management (3)
(This is a WECM course number. Former course prefix/number FHSV 2378.)
A study of the beverage service of the hospitality industry including spirits, wines, beers, and non alcoholic beverages. Topics include purchasing, resource control, legislation, marketing, physical plant requirements, staffing, service, and the selection of wines to enhance foods. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 1304 Dining Room Service (3)
(This is a WECM course number. Former course prefix/number FHSV 1371.)
Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Laboratory fee. (2 Lec., 4 Lab.)
RSTO 1306 Facilities Layout and Design (3)  
(This is a WECM course number. Former course prefix/number FHSV 1376.)  
Overview of the planning, development, and feasibility aspects of building or renovating a food service facility. Application of principles of work and flow analysis, spatial relationships, and equipment selection as they relate to the overall layout and design. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 1311 Marketing of Hospitality Services (3)  
(This is a WECM course number. Former course prefix/number FHSV 2374.)  
An overview of marketing strategies for the hospitality industry including unique features of the hospitality business for marketing orientation. Topics include service marketing, strategic planning, competition, analyzing the environment, and marketing to the season/event. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 1313 Hospitality Supervision (3)  
(This is a WECM course number. Former course prefix/number FHSV 1375.)  
Fundamentals of recruiting, selection, and training of food service and hospitality personnel. Topics include job descriptions, schedules, work improvement, motivation, and applicable personnel laws and regulations. Emphasis on leadership development. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 1317 Nutrition for the Food Service Professional (3)  
(This is a WECM course number. Former course prefix/number FHSV 1381.)  
An introduction to nutrition including nutrients, digestion and metabolism, menu planning, recipe modification, dietary guidelines and restrictions, diet and disease, and healthy cooking techniques. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 1319 Viticulture and Enology (3)  
(This is a WECM course number. Former course prefix/number FHSV 2370.)  
A study of the growing regions, production, processing, and distribution of domestic and international wines. Topics include types of wine grapes, varieties of wine, proper storage procedures, and the techniques of proper wine service. Student must be 21 on first class day. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 1325 Purchasing for Hospitality Operations (3)  
(This is a WECM course number. Former course prefix/number FHSV 1380.)  
Study of purchasing and inventory management of foods and other supplies include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 1380 Cooperative Education - Food and Beverage/Restaurant Operations Manager (3)  
(This is a WECM course number. Former course prefix/number FHSV 7471.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

RSTO 1391 Special Topics in Food and Beverage/Restaurant Operations Manager (3)  
(This is a WECM course number. Former course prefix/number FHSV 2371.)  
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

RSTO 1491 Special Topics in Food and Beverage/Restaurant Operations Manager (4)  
(This is a WECM course number.)  
Topics address recently identified current events, skills, knowledge's, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

RSTO 2301 Principles of Food and Beverage Controls (3)  
(This is a WECM course number. Former course prefix/number FHSV 1382.)  
Suggested prerequisite: Math 1371 or concurrent enrollment. A study of financial principles and controls of food service operation including review of operation policies and procedures. Topics include financial budgeting and cost analysis emphasizing food and beverage labor costs, operational analysis, and international and regulatory procedures. Laboratory fee. (3 Lec., 1 Lab.)
RSTO 2307 Catering (3)
(This is a WECM course number. Former course prefix/number FHSV 2370.)
Principles, techniques, and applications for both on-premises, off-premises, and group marketing of catering operations including food preparation, holding, and transporting techniques. Laboratory fee. (3 Lec., 1 Lab.)

RSTO 2380 Cooperative Education - Food and Beverage/Restaurant Operations Manager (3)
(This is a WECM course number. Former course prefix/number FHSV 7472.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

FRENCH

FREN 1311 Beginning French (3)
(This is a common course number.)
This course is an introduction to French speaking, comprehension, reading, writing and grammar. Cultural insights are also presented. Emphasis is on pronunciation, comprehension, and oral expression. It is strongly recommended that students who plan to study French for more than one semester enroll in French 1411 which includes an extra hour of lab per week (and an extra hour of credit for the course). Students who successfully complete French 1311 and wish to continue their studies of French may register for French 1412. Laboratory fee. (3 Lec., 1 Lab.)

FREN 1411 Beginning French (4)
(This is a common course number. Former course prefix/number FR 101)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)

FREN 1412 Beginning French (4)
(This is a common course number. Former course prefix/number FR 102)
Prerequisite: French 1411 or the equivalent. This course is a continuation of French 1411. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)

FREN 2303 Introduction To French Literature (3)
(This is a common course number. Former course prefix/number FR 203)
Prerequisite: French 2312 or demonstrated competence approved by the instructor. This course is an introduction to French literature. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)

FREN 2304 Introduction To French Literature (3)
(This is a common course number. Former course prefix/number FR 204)
Prerequisite: French 2312 or demonstrated competence approved by the instructor. This course is a continuation of French 2303. It includes readings in French literature, history, culture, art, and civilization. (3 Lec.)

FREN 2306 French Conversation I (3)
(This is a common course number. Former course prefix/number FR 207)
Prerequisite: French 1411 and French 1412 or the equivalent. This course is designed to strengthen and improve oral skills in the language. Oral activities focus on current events, cultural, historical and social issues. Audio-visual media are used to explore French life and society. This course is intended to complement French 2311. The next course in this conversation sequence is French 2372. (3 Lec.)

FREN 2311 Intermediate French (3)
(This is a common course number. Former course prefix/number FR 201)
Prerequisite: French 1412 or the equivalent. Reading, composition, and intense oral practice are covered in this course. Grammar is reviewed. (3 Lec.)

FREN 2312 Intermediate French (3)
(This is a common course number. Former course prefix/number FR 202)
Prerequisite: French 2311 or the equivalent. This course is a continuation of French 2311. Contemporary literature and composition are studied. Grammar is reviewed and expanded. (3 Lec.)

FREN 2372 French Conversation II (3)
Former course prefix/number FR 208
Prerequisite: French 2306 or French 2311 or the equivalent. This course is designed to further strengthen and improve oral skills in the language. Oral activities will continue to focus on current events, cultural, historical and social issues. Audio-visual media are used to explore French life and society. This course is intended to complement French 2312. (3 Lec.)
GEOGRAPHIC INFORMATION SYSTEMS

DFTG 1491 Special Topics in Drafting (4)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 3 Lab.)

SRVY 1315 Surveying Calculations I (3)
(This is a WECM course number.)
An introduction to the mathematics used in surveying and mapping, e.g., algebra, plane trigonometry, and plane, solid, and analytical geometry. (3 Lec.)

SRVY 1419 Introduction to Geographic Information Systems (4)
(This is a WECM course number.)
A study of the theory of geographic information systems, including conceptual understanding and database development, terms, definitions, classifications, use and client requirements, and prevailing and applicable professional standards. Projects and procedures to establish maps based upon geographic information systems. Laboratory fee. (3 Lec., 3 Lab.)

SRVY 1491 Special Topics in Surveying (4)
(This is a WECM course number.)
Prerequisite: SRVY 1419. Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 3 Lab.)

SRVY 2305 Geographic Information Systems Applications (3)
(This is a WECM course number.)
A hands-on course with computer applications providing additional conceptual understanding of geographic information systems and practical applications using a variety of Geographic Information System software. Laboratory fee. (2 Lec., 4 Lab.)

GEOGRAPHY

GEOG 1301 Physical Geography (3)
(This is a common course number. Former course prefix/number GPY 101)
The physical composition of the earth is surveyed. Topics include weather, climate, topography, plant and animal life, land, and the sea. Emphasis is on the earth in space, use of maps and charts, and place geography. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015142)

GEOG 1302 Cultural Geography (3)
(This is a common course number. Former course prefix/number GPY 103)
This course focuses on the development of regional variations of culture. Topics include the distribution of races, religions, and languages. Aspects of material culture are also included. Emphasis is on origins and diffusion. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015342)

GEOG 1303 World Regional Geography (3)
(This is a common course number. Common Course Number GPY 104)
A study of major developing and developed regions with emphasis on awareness of prevailing world conditions and developments, including emerging conditions and trends, and awareness of diversity of ideas and practices to be found in those regions. Course content may include one or more regions. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015342)

GEOG 2312 Economic Geography (3)
(This is a common course number. Former course prefix/number GPY 102)
The relation of humans to their environment is studied. Included is the use of natural resources. Problems of production, manufacturing, and distributing goods are explored. Primitive subsistence and commercialism are considered. (3 Lec.)
(Coordinating Board Academic Approval Number 4507015242)

GEOLOGY

GEOL 1401 Earth Science (4)
(This is a common course number. Former course prefix/number ES 117)
This course is for the non-science major. It covers the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are included. Selected principles and concepts of the applied sciences are explored. This course is also offered as Physical Science 1417. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4001015139)
GEOL 1403 Physical Geology (4)
(This is a common course number. Former course prefix/number GEO 101)
This course is for science and non-science majors. It is a study of earth materials and processes. Included is an introduction to geochemistry, geophysics, the earth's interior, and magnetism. The earth's setting in space, minerals, rocks, structures, and geologic processes are also included. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015139)

GEOL 1404 Historical Geology (4)
(This is a common course number. Former course prefix/number GEO 102)
This course is for science and non-science majors. It is a study of earth materials and processes within a developmental time perspective. Fossils, geologic maps, and field studies are used to interpret geologic history. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015139)

GEOL 1445 Oceanography (4)
(This is a common course number. Former course prefix/number GEO 105)
This course covers the study of the physical and biological characteristics of the ocean. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4007035139)

GEOL 1470 Meteorology (4)
(Former course prefix/number ES 115)
This course will cover weather phenomena and the modern methods of study and presentation of this information. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4007035139)

GEOL 2407 Geologic Field Methods (4)
(This is a common course number. Former course prefix/number GEO 207)
Prerequisites: Geology 1403 and 1404. This course covers basic geologic and topographic mapping, observation of petrologic systems, and an actual field setting. Students will spend a major portion of the course collecting data and constructing topographic and geologic maps and geologic cross sections and columns. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015539)

GEOL 2409 Introduction To Rocks And Mineral Identification (4)
(This is a common course number. Former course prefix/number GEO 201)
Prerequisites: Geology 1403 and 1404. This course introduces crystallography, geochemistry, descriptive mineralogy, petrology, and phase equilibria. Crystal models and hand specimens are studied as an aid to rock and mineral identification. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015239)

GEOL 2470 Field Geology (4)
(Former course prefix/number GEO 205)
Prerequisites: Eight credit hours of geology or demonstrated competence approved by the instructor. Geological features, landforms, minerals, and fossils are surveyed. Map reading and interpretation are also included. Emphasis is on the identification, classification and collection of specimens in the field. This course may be repeated for credit. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006019503. This is a unique need course)

GEOL 2471 Mineralogy (4)
(Former course prefix/number GEO 209)
Prerequisites: Geology 1403 and 1404 and Chemistry 1412. This course covers basic geochemistry; crystal chemistry; crystallography, including symmetry elements, stereographic and gnomonic projections; Miller indices, crystal systems, and forms; x-ray diffraction; optical properties of minerals; descriptive mineralogy including identification of hand specimens; and phase equilibria. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4006015239)

GERMAN

GERM 1311 Beginning German (3)
(This is a common course number.)
This course is an introduction to German speaking, comprehension, reading, writing and grammar. Cultural insights are also presented. Emphasis is on pronunciation, comprehension, and oral expression. It is strongly recommended that students who plan to study German for more than one semester enroll in German 1411 which includes an extra hour of lab per week (and an extra hour of credit for the course). Students who successfully complete German 1311 and wish to continue their studies of German may register for German 1412. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1605015131)

GERM 1411 Beginning German (4)
(This is a common course number. Former course prefix/number GER 101)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1605015131)
GERM 1412 Beginning German (4)
(This is a common course number. Former course prefix/number GER 102)
Prerequisite: German 1411 or the equivalent. This course is a continuation of German 1411. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1605015131)

GERM 2311 Intermediate German (3)
(This is a common course number. Former course prefix/number GER 201)
Prerequisite: German 1412 or the equivalent. This course is a continuation of German 2311. Contemporary literature and composition are studied. Grammar is reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1605015231)

GERM 2312 Intermediate German (3)
(This is a common course number. Former course prefix/number GER 202)
Prerequisite: German 2311 or the equivalent. This course is a continuation of German 2311. Contemporary literature and composition are studied. Grammar is reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1605015231)

GOVERNMENT

GOVT 2301 American Government (3)
(This is a common course number. Former course prefix/number GVT 201)
Prerequisite: Developmental Reading 0093 or meet TASP/Alternative Assessment Standard in Reading. This course is an introduction to the study of political science. Topics include the origin and development of constitutional democracy (United States and Texas), federalism and intergovernmental relations, local governmental relations, local government, parties, politics, and political behavior. (To ensure transferability, students should plan to take both Government 2301 and 2302 within the DCCCD.) (3 Lec.)
(Coordinating Board Academic Approval Number 4510025142)

GOVT 2302 American Government (3)
(This is a common course number. Former course prefix/number GVT 202)
Prerequisite: Developmental Reading 0093 or meet TASP/Alternative Assessment Standard in Reading. The three branches of the United States and Texas government are studied. Topics include the legislative process, the executive and bureaucratic structure, the judicial process, civil rights and liberties, and domestic policies. Other topics include foreign relations and national defense. (To ensure transferability, students should plan to take both Government 2301 and 2302 within the DCCCD.) (3 Lec.)
(Coordinating Board Academic Approval Number 4510025142)

GOVT 2371 Introduction To Comparative Politics (3)
(Former course prefix/number GVT 211)
A comparative examination of governments, politics, problems and policies with illustrative cases drawn from a variety of political systems. (3 Lec.)
(Coordinating Board Academic Approval Number 4509017125. This is a unique need course.)

HEALTH INFORMATION MANAGEMENT

HITT 1160 Clinical-Health Information Technology/Technician (1)
(This is a WECM course number. Former course prefix/number HIMT 1270)
Suggested Prerequisites: HITT 1401 Health Care Date Content and Structure, ENGL 1301 Composition I and HITT 1345 Health Care Delivery Systems concurrently. A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (3 Ext.)
HITT 1161 Clinical-Health Information Technology/Technician (1)
(This is a WECM course number. Former course prefix/number HIMT 2272)
Suggested Prerequisites: HITT 1441 Coding and Classification Systems and HITT 2335 Coding and Reimbursement Methodologies. A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Emphasis will be on ICD-9 and CPT clinical coding with related project to be completed. (6 Ext.)

HITT 1205 Medical Terminology (2)
(This is a WECM course number. Former course prefix/number HIMT 2475)
Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialities and diagnostic procedures. (2 Lec.)

HITT 1249 Pharmacology (2)
(This is a WECM course number. Former course prefix/number HIMT 1376)
Suggested Prerequisites: SCIT 1407 Human Anatomy and Physiology I, SCIT 1408 Human Anatomy and Physiology II, HITT 1205 Medical Terminology and HITT 2231 Medical Terminology-Advanced. Overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems. (2 Lec.)

HITT 1253 Legal and Ethical Aspects of Health Information (2)
(This is a WECM course number. Former course prefix/number HIMT 1375)
Suggested Prerequisites: HITT 1401 Health Care Date Content and Structure, HITT 1345 Health Care Delivery Systems, HITT 1160 Introductory Clinical, ENGL 1301 Composition I and MATH 1314 College Algebra. General principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data with overview of guidelines for Texas Department of Health Vital Statistics and studies. (2 Lec.)

HITT 1255 Health Care Statistics (2)
(This is a WECM course number. Former course prefix/number HIMT 1377)
Suggested Prerequisites: HITT 1401 Health Care Date Content and Structure, HITT 1345 Health Care Delivery Systems, HITT 1160 Introductory Clinical, ENGL 1301 Composition I and MATH 1314 College Algebra. General principles of health care statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data with overview of guidelines for Texas Department of Health Vital Statistics and studies. (2 Lec.)

HITT 1345 Health Care Delivery Systems (3)
(This is a WECM course number. Former course prefix/number HIMT 2275)
Suggested Prerequisites: HITT 1401 Health Care Date Content and Structure, ENGL 1301 Composition I and HITT 1160 Introductory Clinical. Introduction to organization, financing, and delivery of health care services, accreditation, licensure and regulatory agencies. (3 Lec.)

HITT 1401 Health Data Content and Structure (4)
(This is a WECM course number. Former course prefix/number HIMT 1375)
Suggested Prerequisites: SCIT 1407 Human Anatomy and Physiology I, SCIT 1408 Human Anatomy and Physiology II, HITT 1205 Medical Terminology, and HITT 2231 Medical Terminology-Advanced. Overview of the basic concepts of the pharmacological treatment of various diseases affecting major body systems. (2 Lec.)
HITT 2160 Clinical-Health Information Technology/Technician (1)
(This is a WECM course number. Former course prefix/number HIMT 2271)
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Emphasis will be on management functions within the health care setting. Limited to the graduates only each year. (5 Ext.)

HITT 2231 Medical Terminology - Advanced (2)
(This is a WECM course number. Former course prefix/number HIMT 2475)
Study of advanced terminology in various medical and surgical specialties. (2 Lec.)

HITT 2335 Coding and Reimbursement Methodologies (3)
(This is a WECM course number. Former course prefix/number HIMT 2471)
Suggested Prerequisite: HITT 1441 Coding and Classification Systems. Development of advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding perspective payment systems and methods of reimbursement. (2 Lec., 2 Lab.)

HITT 2343 Quality Assessment and Performance Improvement (3)
(This is a WECM course number. Former course prefix/number HIMT 1377)
Suggested Prerequisites: HITT 1401 Health Care Date and Structure, HITT 1345 Health Care Delivery Systems, HITT 1160 Introductory Clinical, ENGL 1301 Composition I and MATH 1314 College Algebra. Study of the many facets of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality improvement functions, quality tools, utilization management, risk management and medical staff quality issues. (3 Lec.)

HITT 2239 Health Information Organization and Supervision
(This is a WECM course number. Former course prefix/number HIMT 2270)
Principles of organization and supervision of human, fiscal and capital resources. (2 Lec.)

MDCA 1402 Human Disease/Pathophysiology (4)
(This is a WECM course number. Former course prefix/number HIMT 1376)
Suggested Prerequisite: SCIT 1407 Human Anatomy and Physiology I, SCIT 1408 Human Anatomy and Physiology II, HITT 1205 Medical Terminology and HITT 2231 Medical Terminology - Advanced. A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs, and symptoms of common diseases of all body systems. (2 Lec., 2 Lab.)

SCIT 1407 Human Anatomy and Physiology I (4)
(This is a WECM course number. Former course prefix/number BIOL 1470)
Suggested Prerequisite: SCIT 1470 Human Anatomy and Physiology I. In-depth coverage of the structure and function of the human body. Topics include cell structure and function; tissues; body organization; and the integumentary, skeletal, muscular, nervous and endocrine systems. Emphasis is on homeostasis. 3 Lec., 3 Lab.)

SCIT 1408 Human Anatomy and Physiology II (4)
(This is a WECM course number. Former course prefix/number BIOL 1472)
A continuation of Human Anatomy and Physiology I with in-depth coverage of the structure and function of the human body. Topics include the digestive, respiratory, cardiovascular, lymphatic, immune, excretory, and reproductive systems. Emphasis is on homeostasis. (3 Lec., 3 Lab.)

HEALTH OCCUPATIONS CORE CURRICULUM

HPRS 1202 Wellness and Health Promotion (2)
(This is a WECM course number. Former course prefix/number HOC 1274)
An overview of wellness theory and its application throughout the life span. Focus on attitude development, impact of cultural beliefs, and communication of wellness. (2 Lec)

HPRS 1204 Basic Health Professions Skills (2)
(This is a WECM course number. Former course prefix/number HOC 1270)
A study of the concepts that serve as the foundation for health profession courses. Topics include client handling and safety issues, basic client monitoring, and health documentation methods. Laboratory fee. (1 Lec., 4 Lab)
HPRS 1291 Special Topics in Health Professions and Related Sciences, Other (2)
(This is a WECM course number. Former course prefix/number HOCC 1271)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course builds on previously acquired knowledge and skills. Lecture and simulated laboratory experience prepares the student to perform patient care utilizing critical thinking and advanced clinical skills. The student for successful completion must demonstrate an effective level of practice and knowledge. Laboratory fee. (1 Lec., 4 Lab.)

HPRS 2201 Pathophysiology (2)
(This is a WECM course number. Former course prefix/number HOCC 1273)
Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. (2 Lec.)

HPRS 2231 General Health Professions Management (2)
(This is a WECM course number. Former course prefix/number HOCC 1272)
Exploration of the management concepts necessary for effective health profession operations. Laboratory fee. (1 Lec., 2 Lab)

HPRS 2300 Pharmacology for Health Professions (3)
(This is a WECM course number. Former course prefix/number HOCC 1370)
A study of drug classifications, actions, therapeutic uses, adverse effects, methods of administration, client education, and calculation of dosages. (3 Lec.)

HEATING, VENTILATION AND AIR CONDITIONING
(Air Conditioning and Refrigeration Technology)

HART 1368 Practicum (Or Field Experience) - Heating, Air Conditioning, And Refrigeration Technologies/Technicians (3)
(This is a WECM course number.)
Prerequisite: HART 1401, HART 1403, and HART 1407. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

HART 1380 Cooperative Education - Heating, Air Conditioning, And Refrigeration Technologies/Technicians (3)
(This is a WECM course number.)
Prerequisite: HART 1401, HART 1403, and HART 1407. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

HART 1401 Electricity Principles (4)
(This is a WECM course number. Former course prefix/number HVAC 1671.)
Principles of electricity as required by HVAC technicians including proper use of test equipment, A/C and D/C circuits, and component theory and operation. Laboratory fee. (3 Lec., 3 Lab.)
HART 1403 A/C Control Principles (4)
(This is a WECM course number. Former course prefix/number HVAC 1671.)
Prerequisite: HART 1401. A basic study of electrical, pressure, and temperature controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohms law as applied to A/C controls and circuits. Laboratory fee. (3 Lec., 3 Lab.)

HART 1407 Refrigeration Principles (4)
(This is a WECM course number. Former course prefix/number HVAC 1670.)
An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components. Laboratory fee. (3 Lec., 3 Lab.)

HART 1441 Residential Air Conditioning (4)
(This is a WECM course number. Former course prefix/number HVAC 1672.)
Prerequisite: HART 1403, HART 1407 or consent of instructor. A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Laboratory fee. (3 Lec., 3 Lab.)

HART 1442 Commercial Refrigeration (4)
(This is a WECM course number. Former course prefix/number HVAC 2374 or HVAC 2380.)
Theory of and practical application in the maintenance of commercial refrigeration; high, medium, and low temperature applications and ice machines. Laboratory fee. (3 Lec., 3 Lab.)

HART 1445 Gas And Electric Heating (4)
(This is a WECM course number. Former course prefix/number HVAC 1673.)
Prerequisite: HART 1403 or consent of instructor. A study of the procedures and principles used in servicing heating systems including gas fired and electric furnaces. Laboratory fee. (3 Lec., 3 Lab.)

HART 1449 Heat Pumps (4)
(This is a WECM course number. Former course prefix/number HVAC 1673.)
Prerequisite: HART 1403, HART 1407 or consent of instructor. A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. Laboratory fee. (3 Lec., 3 Lab.)

HART 1451 Energy Management (4)
(This is a WECM course number. Former course prefix/number HVAC 2377 or HVAC 2381.)
Basic heat transfer theory; sensible and latent heat loads; building envelope construction; insulation, lighting, and fenestration types; and conducting energy audit procedures. The course develops energy audit recommendations based on local utility rates, building use, and construction. Laboratory activities include developing energy audit reports, installing energy saving devices, and measuring energy consumption. Laboratory fee. (3 Lec., 3 Lab.)

HART 1491 Special Topics in Heating, Air Conditioning, and Refrigeration Technologies/Technicians (4)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 3 Lab.)

HART 1492 Special Topics in Energy Management and Systems Technology/Technician (4)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 3 Lab.)

HART 1494 Special Topics in Heating, Air Conditioning, and Refrigeration Mechanic and Repairer (4)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 3 Lab.)

HART 1507 Refrigeration Principles (5)
(This is a WECM course number. Former course prefix/number HVAC 2376 or HVAC 2378.)
An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationships, safety, refrigeration containment, and refrigeration components. Laboratory fee. (4 Lec., 2 Lab.)
HART 2368 Practicum (Or Field Experience) - Heating, Air Conditioning, And Refrigeration Technologies/Technicians (3)  
(This is a WECM course number.)  
Prerequisite: HART 1401, HART 1403, and HART 1407.  
Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

HART 2380 Cooperative Education - Heating, Air Conditioning, And Refrigeration Technologies/Technicians (3)  
(This is a WECM course number. Former course prefix/number HVAC 7371.)  
Prerequisite: HART 1401, HART 1403, and HART 1407.  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

HART 2431 Advanced Electricity (4)  
(This is a WECM course number.)  
Advanced electrical instruction and skill building in installation and serving of air conditioning and refrigeration equipment including detailed instruction in motors and power distribution and introduction to solid state devices. Laboratory fee. (3 Lec., 3 Lab.)

HART 2434 Advanced A/C Controls (4)  
(This is a WECM course number. Former course prefix/number HVAC 2379.)  
Methods for troubleshooting electrical control devices and control circuits including correctly wiring electrical components. Laboratory fee. (3 Lec., 3 Lab.)

HART 2436 Troubleshooting (4)  
(This is a WECM course number.)  
Prerequisite: HART 1441, HART 1445, HART 1449, or consent of instructor. An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. Laboratory fee. (3 Lec., 3 Lab.)

HART 2438 Air Conditioning Installation/Service (4)  
(This is a WECM course number.)  
Prerequisite: HART 1401, HART 1507 or consent of instructor. A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on service, troubleshooting, performance testing, and repair techniques. Laboratory fee. (3 Lec., 3 Lab.)

HART 2441 Commercial Air Conditioning (4)  
(This is a WECM course number. Former course prefix/number HVAC 2375.)  
A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. Laboratory fee. (3 Lec., 3 Lab.)

HART 2443 Industrial Air Conditioning (4)  
(This is a WECM course number.)  
A study of components, accessories, applications, and installation of air conditioning systems above 25 tons capacity. Laboratory fee. (3 Lec., 3 Lab.)

HART 2445 Air Conditioning Systems Design (4)  
(This is a WECM course number.)  
Prerequisite: Advanced standing, or consent of instructor. A study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Laboratory fee. (3 Lec., 3 Lab.)

HISTORY

HIST 1301 History Of The United States (3)  
(This is a common course number. Former course prefix/number HST 101)  
Prerequisite: Developmental Reading 0093 or meet TASP/Alternative Assessment Standard in Reading. The history of the United States is presented, beginning with the European background and first discoveries. The pattern of exploration, settlement, and development of institutions is followed throughout the colonial period and the early national experience to 1877. (3 Lec.)  
(Coordinating Board Academic Approval Number 4508025142)
HIST 1302 History Of The United States (3)
(This is a common course number. Former course prefix/number HST 102)
Prerequisite: Developmental Reading 0093 or meet TASP/Alternative Assessment Standard in Reading. The history of the United States is surveyed from the Reconstruction era to the present day. The study includes social, economic, and political aspects of American life. The development of the United States as a world power is followed. (3 Lec.)
(Coordinating Board Academic Approval Number 4508025142)

HIST 2301 History of Texas from 1500 to the Present (3)
(This is a common course number.)
A survey of Texas development from early Spanish colonization (1500) to the establishment of the modern urban state. The course emphasizes the variety of influences from Indian, Spanish and American cultures. The social, political and economic evolution of the state, including the multi-ethnic character of its population, is studied. (3 Lec.)
(Coordinating Board Academic Approval Number 4508025242)

HIST 2311 Western Civilization (3)
(This is a common course number. Former course prefix/number HST 105)
The civilization in the West from ancient times through the Enlightenment is surveyed. Topics include the Mediterranean world, including Greece and Rome, the Middle Ages, and the beginnings of modern history. Particular emphasis is on the Renaissance, Reformation, the rise of the national state, the development of parliamentary government, and the influences of European colonization. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015442)

HIST 2312 Western Civilization (3)
(This is a common course number. Former course prefix/number HST 106)
This course is a continuation of History 2311. It follows the development of Western civilization from the Enlightenment to current times. Topics include the Age of Revolution, the beginning of industrialism, 19th century, and the social, economic, and political factors of recent world history. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015442)

HIST 2321 World Civilizations (3)
(This is a common course number. Former course prefix/number HST 103)
This course presents a survey of ancient and medieval history with emphasis on Asian, African, and European cultures. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015342)

HIST 2322 World Civilizations· (3)
(This is a common course number. Former course prefix/number HST 104)
This course is a continuation of History 2321. The modern history and cultures of Asia, Africa, Europe, and the Americas, including recent developments, are presented. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015342)

HIST 2370 Latin American History (3)
(Former course prefix/number HST 112)
This course presents developments and personalities which have influenced Latin American history. Topics include Indian cultures, the Conquistadors, Spanish administration, the wars of independence, and relations with the United States. A brief survey of contemporary problems concludes the course. (3 Lec.)
(Coordinating Board Academic Approval Number 0501079125. This is a unique need course.)

HIST 2372 Advanced Historical Studies (3)
(Former course prefix/number HST 205)
Prerequisite: Six hours of history. An in-depth study of minority, local, regional, national, or international topics is presented. This course may be repeated for credit when topics vary. (3 Lec.)
(Coordinating Board Academic Approval Number 4508015642)

HIST 2380 The Heritage Of Mexico (3)
(This is a common course number. Former course prefix/number HST 110)
This course includes an introduction to the history of Mexico. The course focuses on the social, political, economic and cultural contributions of Mexican-Americans to the United States. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015342)

HIST 2381 African-American History (3)
(This is a common course number. Former course prefix/number HST 120)
The role of African Americans in the history of the United States is studied. The slave trade and slavery in the United States are reviewed. Contributions of African Americans in the U.S. are described. Emphasis is on the political, economic, and sociological factors of African American life in the 20th century. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015342)

HORTICULTURE TECHNOLOGY

FMKT 1401 Floral Design (4)
(Former course prefix/number HORT 1471.)
Principles of floral art, flowers, and other design materials. Topics include special and unusual floral designs. Laboratory fee. (2 Lec., 6 Lab.)
FMKT 2331 Advanced Floral Design (3)
(This is a WECM course number. Former course prefix/number HORT 2373.)
A study of commercial floral design as used in the retail floral industry. Topics include advanced techniques in floral art, corsage making, wedding design, memorial decoration, religious and fraternal design, and other special occasion design. Laboratory fee. (2 Lec., 3 Lab.)

FMKT 2335 Flower Shop Management (3)
(This is a WECM course number. Former course prefix/number HORT 2376.)
A study of flower shop operations in the florist industry. Topics include the structure of the industry, shop location, organization, marketing methods, and management practices. Laboratory fee. (2 Lec., 3 Lab.)

HALT 1205 Horticulture Soils (2)
(This is a WECM course number. Former course prefix/number HORT 1272.)
A study of the physical and properties of soil including structure and texture. Topics include the origin and development of soils, the composition of a soil horizon, and the interrelationship between soil fertility and plants. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1209 Interior Plants (2)
(This is a WECM course number. Former course prefix/number HORT 1271.)
Instruction in the identification and classification of the plants used in home and commercial interior landscapes. Topics include design characteristics for interiorscapes and environmental requirements of the plants. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1211 Shrubs, Vines, and Groundcovers (2)
(This is a WECM course number. Former course prefix/number HORT 1271.)
In-depth coverage of the shrubs, vines, and groundcovers used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and use in the landscape. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1213 Economic Entomology (2)
(This is a WECM course number.)
An overview of insects and related organisms with an emphasis on destructive, predaceous, parasitic and beneficial species. Topics include insect taxonomy, anatomy, morphology and physiology and the application of proper biological and chemical control measures. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1217 Trees (2)
(This is a WECM course number. Former course prefix/number HORT 1270.)
A study of the trees used in the horticulture industry. Topics include identification, characteristics, adaptation, cultural requirements, pest and disease problems, and trees in the landscape. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1224 Turfgrass Science and Management (2)
(This is a WECM course number. Former course prefix/number HORT 1270.)
In-depth coverage of various species of warm and cool season grasses including their uses, application, adaptability, environmental tolerances, anatomy and physiological responses. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1227 Horticulture Equipment Management (2)
(This is a WECM course number. Former course prefix/number HORT 1270.)
Instruction in identification and application of various types of powered equipment used in the horticulture industry. Presentation of functions, operations, troubleshooting techniques and repair of equipment. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1244 Propagation of Woody Ornamentals (2)
(This is a WECM course number. Former courseprefix/number HORT 1270.)
Suggested prerequisite: Approval from professor. Instruction in the principles of sexual and asexual propagation of woody ornamentals. Topics include propagation by seed, cutting, budding, layering and grafting. Topics also include management, production and scheduling. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1253 Landscape Computer Design (2)
(This is a WECM course number. Former course prefix/number HORT 1273.)
A course in computer-aided landscape design. Emphasis on the application of design concepts and techniques using software. Laboratory fee. (1 Lec., 3 Lab.)

HALT 1303 Herbaceous Plants (3)
(This is a WECM course number. Former course prefix/number HORT 1370.)
An in-depth study of herbaceous plant material. Topics include practices and procedures used in the identification, growth, propagation, maintenance, and utilization of herbaceous plants in the horticulture industry. Laboratory fee. (2 Lec., 3 Lab.)
HALT 1315 Fundamentals of Landscape Planning (3)
(This is a WECM course number. Former course prefix/number HORT 1372.)
Exploration of the concepts and practices used in preparing landscape plans. Projects in constructing and improving landscapes through survey, perspective, contour and construction drawings. Laboratory fee. (1 Lec., 6 Lab.)

HALT 1319 Landscape Construction (3)
(This is a WECM course number.)
Exploration of landscape construction materials and the methods used for installation. Topics on soil preparation, including wood, concrete, and masonry construction; and landscape lighting, including pools, spas, and general construction details. Laboratory fee. (2 Lec., 3 Lab.)

HALT 1320 Horticulture Calculations (3)
(This is a WECM course number. Former course prefix/number none.)
Skill development in and reinforcement of the formulas and calculations commonly used in the horticulture industry. Emphasis on business calculations and problem-solving skills. Laboratory fee. (3 Lec.)

HALT 1351 Landscape Business Operations (3)
(This is a WECM course number. Former course prefix/number HORT 2371.)
Suggested prerequisite: Approval from professor
Instruction in the structure of the landscape business including cost estimation; organization; equipment needs; interpretation of financial reports; and material, labor and equipment management. Emphasis on the types of landscape operations, marketing, legal forms, construction law and safety. Laboratory fee. (2 Lec., 3 Lab.)

HALT 1391 Special Topics in Horticulture Services Operations and Management, General (3)
(This is a WECM course number. Former course prefix/number none.)
Suggested prerequisite: Approval from professor
Topics address recently identified current events, skills, knowledge's and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 5 Lab.)

HALT 1401 Principles of Horticulture (4)
(This is a WECM course number. Former course prefix/number HORT 1470.)
An overview of the horticulture industry, plant science, terminology, classification, propagation, environmental responses, and careers and opportunities in the field of horticulture. Laboratory fee. (3 Lec., 3 Lab.)

HALT 1422 Landscape Design (4)
(This is a WECM course number. Former course prefix/number HORT 2471.)
Suggested prerequisite: Approval from professor
A study of the principles and elements of landscape design. Topics include client interview, site analysis, plan view, scale, plant selection, basic drawing and drafting skills and plan preparation. Laboratory fee. (2 Lec., 6 Lab.)

HALT 1491 Special Topics in Horticulture Services Operations and Management, General (4)
(This is a WECM course number.)
Suggested prerequisite: Approval from professor
Topics address recently identified current events, skills, knowledge's and/or attitudes and behaviors pertinent to technology or occupations and relevant to the professional development of the student. Laboratory fee. (2 Lec., 5 Lab.)

HALT 2201 Arboriculture (2)
(This is a WECM course number. Former course prefix/number none.)
Fundamentals of woody plant physiology and growth including techniques and procedures utilized in making sound tree care decisions related to growth and pest and disease control. Topics include design principles of planning and maintenance for city streets, parks and commercial and residential properties. Laboratory fee. (1 Lec., 3 Lab.)

HALT 2320 Nursery Production and Management (3)
(This is a WECM course number. Former course prefix/number HORT 2370.)
Suggested prerequisite: Approval from professor.
An overview of the procedures for establishing and operating a commercial nursery. Topics include site selection, structures, equipment, stock selection, production practices, harvesting, marketing and management practices. Laboratory fee. (2 Lec., 3 Lab.)

HALT 2331 Advanced Landscape Design (3)
(This is a WECM course number. Former course prefix/number HORT 2375.)
Suggested prerequisite: Approval from professor
In-depth coverage of advanced practices in landscape planning for commercial and residential landscapes. Topics include advanced design analysis, architectural elements, space articulation, and land engineering concepts. Laboratory fee. (2 Lec., 3 Lab.)
HALT 2341 Interiorscaping (3)
(This is a WECM course number. Former course prefix/number HORT 2374.)
Suggested prerequisite: Approval from professor.
Instruction in the selection, propagation, culture, and marketing of foliage plants and other tropical and subtropical plants used in interiorscapes. Topics include the principles of interiorscaping and the care of plants in indoor environments. Laboratory fee. (2 Lec., 3 Lab.)

HALT 2380 Cooperative Education-Horticulture Services Operations and Management, General (3)
(This is a WECM course number. Former course prefix/number HORT 7371 and HORT 7372.)
Suggested prerequisite: Approval from professor
Career-related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)

HALT 2402 Greenhouse Crop Production (4)
(This is a WECM course number. Former course prefix/number HORT 2470.)
Suggested prerequisite: Approval from professor.
In-depth coverage of the production of crops within the controlled environment of greenhouses. Topics include growing techniques, environment control, crop rotation, scheduling, preparation for sale and marketing. Laboratory fee. (2 Lec., 6 Lab.)

HOSPITALITY MANAGEMENT

HAMG 1305 Principles Of Tourism Management (3)
(This is a WECM course number.)
Introduction to the travel and tourism industry. Topics include marketing, travel, the market, and the shape of travel demand. (3 Lec.)

HAMG 1311 Sanitation And Safety (3)
(This is a WECM course number.)
The fundamentals of sanitation practices, laws, methods, and techniques of food handling for protection, safety, and accident prevention. (3 Lec.)

HAMG 1313 Front Office Procedures (3)
(This is a WECM course number. Former course prefix/number HMMT 1371.)
A study of the flow of activities and functions in today's lodging operation. Topics include a comparison of manual, machine assisted, and computer based methods for each front file function. (3 Lec.)

HAMG 1317 Recreational Services (3)
(This is a WECM course number.)
The study of guest recreation and entertainment including available space requirements, cost of operation and maintenance, layout and design, and direct and indirect benefits. (3 Lec.)

HAMG 1319 Computers In Hospitality (3)
(This is a WECM course number.)
An introduction to computers and their relationship as an information system to the hospitality industry. (3 Lec.)

HAMG 1321 Introduction To Hospitality Industry (3)
(This is a WECM course number. Former course prefix/number HMMT 1370)
Introduction to the elements of the hospitality industry. (3 Lec.)

HAMG 1324 Hospitality Human Resources Management (3)
(This is a WECM course number. Former course prefix/number HMMT 2376.)
A study of the principles and procedures of managing people in the hospitality workplace. (3 Lec.)

HAMG 1340 Hospitality Legal Issues (3)
(This is a WECM course number. Former course prefix/number HMMT 2371.)
A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. (3 Lec.)

HAMG 1342 Guest Room Maintenance (3)
(This is a WECM course number. Former course prefix/number HMMT 1372.)
Demonstrates the working relationship in the lodging industry between housekeeping and maintenance. (3 Lec.)

HAMG 1381 Cooperative Education - Hospitality Administration And Management (3)
(This is a WECM course number. Former course prefix/number HMMT 7371 or HMMT 7471.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab)
HAMG 1391 Special Topics In Hospitality Administration And Management (3)
(This is a WECM course number. Former course prefix/number HMMT 2377.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)

HAMG 2301 Principles Of Food And Beverage Operations (3)
(This is a WECM course number. Former course prefix/number HMMT 2372.)
An introduction to food, beverage, and labor cost controls with an overview of the hospitality industry from procurement to marketing. Examination of cost components including forecasting, menu planning and pricing, logistical support, production, purchasing, and quality assurance. (3 Lec.)

HAMG 2305 Hospitality Management And Leadership (3)
(This is a WECM course number.)
An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formulation, communications, motivation and team building. (3 Lec.)

HAMG 2307 Hospitality Marketing And Sales (3)
(This is a WECM course number. Former course prefix/number HMMT 2374.)
Identification of the core principles of marketing and their impact on the hospitality industry. (3 Lec.)

HRMO 1301 Hospitality Advertising (3)
(This is a WECM course number.)
Prerequisite: None. An overview of effective advertising and promotion techniques for hospitality managers. (3 Lec.)

HRMO 1303 Hospitality Industry Sales Promotion (3)
(This is a WECM course number.)
Prerequisite: None. A study of the relationship of production and consumption in the hospitality industry with emphasis on the role of sales promotion. (3 Lec.)

HUMAN DEVELOPMENT

CREX 1309 Career Exploration/Planning (3)
(This is a WECM course number. Former course prefix/number HD 104/HDEV 1370)
An introduction to the process of career decision-making, educational planning, and job searching. Topics include analyzing personal career interests, values, and aptitudes; surveying and researching career fields with related educational and training requirements; practicing the decision-making process; and basic job search skills such as completing applications, writing letters of application, developing and using resumes and interviewing. (3 Lec.)

HDEV 0092 Student Success (3)
(Former course prefix/number HD 092)
In this orientation course, students are introduced to academic and personal goal-setting and learning skills that enhance their chances for educational success. Students will learn how to develop positive attitudes toward themselves, improve communication and decision-making skills, and make effective use of campus resources. This course supports students enrolling in other appropriate remediation. (3 Lec.)
(Coordinating Board Academic Approval Number 3201995140)

HDEV 0100 Educational Alternatives (1)
(Former course prefix/number HD 100)
The learning environment is introduced. Career, personal study skills, educational planning, and skills for living are all included. Emphasis is on exploring career and educational alternatives and learning a systematic approach to decision-making. A wide range of learning alternatives is covered, and opportunity is provided to participate in personal skills seminars. This course may be repeated for credit. (1 Lec.)
(Coordinating Board Academic Approval Number 3201995140)

HDEV 0110 Assessment Of Prior Learning (1)
(Former course prefix/number HD 110)
Prerequisite: Limited to students in Technical Occupational Programs. Demonstrated competence approved by the instructor is required. This course is designed to assist students in documenting prior learning for the purpose of applying for college credit. Students develop a portfolio which includes a statement of educational/career goals, related non-collegiate experiences which have contributed to college-level learning, and documentation of such experiences. This course may be repeated for credit. (1 Lec.)
HDEV 1372 Cognitive Processes: The Master Student Course (3)
(Former course prefix/number HD 108)
This course is an overview of the processes of learning, memory, perception, language and thought. Special emphasis is placed upon the practical applications of these psychological principles for students to learn, practice and adopt in support of their success in college. Adaptation to the higher education atmosphere is also emphasized. (3 Lec.)
(Coordinating Board Academic Approval Number 4203019125. This is a unique need course.)

HDEV 2315 Principles And Processes Of Personal And Social Adjustment (3)
( Former course prefix/number HD 112. Common course number is PSYC 2315)
Designed as an Applied Psychology and Human Relations course, this course is an intensive theoretical and practical study of interpersonal communication processes. The course content surveys the major psychological principles of communication and utilizes an experiential model for the practical application of skill based competencies. Students develop an awareness and understanding of their own feelings, values, attitudes, and behaviors and also explore the processes by which these factors effect the quality of their interactions with others. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015640)

HUMANITIES

HUMA 1301 Introduction To The Humanities (3)
(This is a common course number. Former course prefix/number HUM 101)
Introduction to the Humanities focuses on the study and appreciation of the fine and performing arts and the ways in which they reflect the values of civilizations. (3 Lec.)
(Coordinating Board Academic Approval Number 2401035135)

HUMA 1302 Advanced Humanities (3)
(This is a common course number. Former course prefix/number HUM 102)
Prerequisite: Humanities 1301 or demonstrated competence approved by the instructor. Human value choices are presented through the context of the humanities. Universal concerns are explored, such as a person's relationship to self and to others and the search for meaning. The human as a loving, believing and hating being is also studied. Emphasis is on the human as seen by artists, playwrights, film makers, musicians, dancers, philosophers, and theologians. The commonality of human experience across cultures and the premises for value choices are also stressed. (3 Lec.)
(Coordinating Board Academic Approval Number 2401035135)

INTERIOR DESIGN

DFTG 1309 Basic Computer-Aided Drafting (3)
(This is a WECM course number. Former course prefix/number INTD 1371 or INT 171)
An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup, creating and modifying geometry, storing and retrieving predefined shapes, placing, rotating and scaling objects, adding text and dimensions, using layers, coordinating systems, as well as input and output devices. Manual drafting will also be included in the course. Laboratory fee. (2 Lec., 4 Lab.)

INDS 1301 Basic Elements of Design (3)
(This is a WECM course number. Former course prefix/number INTD 1374 or INT 168)
Prerequisite: Interior Design Program major. A study of basic design concepts with projects in shape, line, value, texture, pattern, spatial illusion, and form. Laboratory fee. (2 Lec., 4 Lab.)
INDS 1319 Technical Drawing for Interior Designers (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 1370 or INT 164)
Prerequisite: DFTG 1309. An introduction to reading
and preparing technical construction drawings for interior
design including plans, elevations, details, schedules,
dimensions and lettering. Both manual and Autocad
plans will be generated. Laboratory fee. (2 Lec., 4 Lab.)

INDS 1341 Color Theory and Application (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 1370 or INT 164)
Prerequisite: Interior Design major. A study of Color
theory and its applications to interior design. Laboratory
fee. (2 Lec., 4 Lab.)

INDS 1345 Commercial Design I (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 2372 or INT 262)
Prerequisites: INDs 1319, 1301, 2335, 2313, 2321,
2317, 2315. A study of design principles applied to
furniture lay-out and space planning for commercial
interiors. Laboratory fee. (2 Lec. 4 Lab.)

INDS 1351 History of Interiors I (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 2377 OR INT 293)
Historical survey of antiques and European styles and
periods of architecture, interior, and furnishings. With
consideration of Egypt, Greece, Italy, Spain, and France.
An illustrated research notebook is required. Laboratory
fee. (3 Lec., 1 lab.)

INDS 1352 History of Interiors II (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 2378 or INT 294)
Prerequisite: INDs 1351. Historical survey of English,
American, Asian, and twentieth century styles and
periods of Architecture, interiors, and furnishings.
Laboratory fee. (3 Lec., 1 Lab.)

INDS 1391 Special Topics in Interior Design (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 3373 or INT 395)
Prerequisites: INDs 1352, 2325, and concurrent
enrollment in INDs 2331. This is an introductory course
to the many aspects of restoration, preservation, and
adaptive reuse of structures and spaces. Emphasis is
placed on the architectural interior. Legal and tax issues
are discussed. Restoration projects involving actual
structures are studied, along with theoretical problems.
Specialized resources are included. Laboratory fee. (2
Lec., 3 Lab.)

INDS 1491 Special Topics in Interior Design (4)
(Thi.s is a WECM course number. Former course prefix/number
INTD 3470 and 3375)
Prerequisites: INDs 2331, 1391, 2325. The principles
studied in INDs 2331 are expanded to include project
management. Advanced construction documents are
prepared. The design research document prepared in
INDs 2331 will be developed into a capstone design
experience demonstrating mastery of the interior design
process from concept to completion. Laboratory fee. (3
Lec., 4 Lab.)

INDS 2280 Cooperative Education - Interior Design
(2)
(Thi.s is a WECM course number. Former course prefix/number
INTD 7271 or INT 702)
Career related activities encountered in the student’s
area of specialization are offered through a cooperative
agreement between the college, employer, and student.
Under supervision of the college and the employer, the
student combines classroom learning with work
experience. Directly related to a technical discipline,
specific learning objectives guide the student through the
paid work experience. This course may be repeated if
topic and learning outcomes vary. (1 Lec., 10 Ext.)

INDS 2307 Textiles for Interior Design (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 2374 or INT 281)
The study of interior design textiles including,
characteristics, care, codes, and applications. A project
notebook is required. (3 Lec.)

INDS 2313 Residential Design I (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 1375 or INT 167)
Prerequisites: INDs 1301, DFTG 1309. The study of
residential spaces, including identification of client
needs, programming, standards, space planning,
drawings, and presentations. Laboratory fee. (2 Lec., 4
Lab.)

INDS 2315 Lighting for Interior Designers (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 2376 or INT 284)
Prerequisites: INDs 1341, 1319. Fundamentals of
Lighting design, including lamps, luminaries, lighting
techniques, and applications for residential and
commercial projects. Laboratory fee. (2 Lec., 4 Lab.)

INDS 2317 Rendering Techniques (3)
(Thi.s is a WECM course number. Former course prefix/number
INTD 2373 or INT 277)
A study of rendering techniques for formal interior design
presentation, using a variety of media. Laboratory fee.
(2 Lec., 4 Lab.)
INDS 2321 Presentation Drawing (3)
(This is a WECM course number. Former course prefix/number
INTD 1376 or INT 177)
An introduction to two- and three-dimensional presentations, including drawings with one- and two-
point perspectives, plans, and elevations. Laboratory fee. (2 Lec., 4 Lab.)

INDS 2325 Professional Practices for Interior Designers (3)
(This is a WECM course number. Former course prefix/number
INTD 3372 or INT 385)
A study of business practices and procedures for interior designers, including professional ethics, project
management, marketing, and legal issues. (3 Lec., 1 Lab.)

INDS 2331 Commercial Design II (3)
(This is a WECM course. Former course prefix/number INTO 3370
and 3374 or INT 363 and 367)
Advanced concepts of specialized commercial interior design projects, including hospitality, corporate, retail,
health care, institutional, or other specialized commercial design projects. In addition the student will select a
project and complete a research paper, which will be completely developed into the capstone interior design
project in INDS 1491. Laboratory fee. (2 Lec., 4 Lab.)

INDS 2335 Residential Design II (3)
(This is a WECM course. Former course prefix/number INTO 2371
or INT 261)
Prerequisites: INDS 1341, 2313, 1319, 2321. A comprehensive study of complex residential interior
design problems, including advanced space planning, specifications, budgets, and presentation renderings.
Laboratory fee. (2 Lec. 4 Lab.)

INTERNATIONAL BUSINESS AND TRADE

IBUS 1191 Special Topics in International Business (1)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to
the technology or occupation and relevant to the professional development of the student. Business, industrial,
or service requirements in the international arena will determine specific topics or skill development offered, such as, new software packages, regulation updates, or market research information. (1 Lec.)

IBUS 1291 Special Topics in International Business (2)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to
the technology or occupation and relevant to the professional development of the student. Business, industrial,
or service requirements in the international arena will determine specific topics or skill development offered, such as, new software packages, regulation updates, or market research information. (2 Lec.)

IBUS 1301 Principles Of Imports Exports I (3)
(This is a WECM course number. Former course prefix/number
IBTR 2372.)
Suggested Prerequisite: IBUS 1305. A study of export management processes and procedures. Topics include
governmental controls, licensing of products, documentation, commercial invoices, and traffic
procedures. Application to human and public relations, management of personnel, finance, and accounting
procedures. Other topics include international carriers, logistics, insurance, payments including letters of credit,
requests for quotation, and other trade terminology. This course may be repeated for credit. (3 Lec.)

IBUS 1302 Principles Of Imports Exports II (3)
(This is a WECM course number.)
Suggested Prerequisites: IBUS 1301 and IBUS 1305. The practices and processes of import management
operations, including government controls. Skill development in the preparation and understanding of
import documents such as customs invoices, packing lists, and commercial invoices. The student will process
appropriate import documentation and utilize selected regulations of daily operations. This course may be
repeated for credit. (3 Lec.)

IBUS 1305 Introduction To International Business And Trade (3)
(This is a WECM course number. Former course prefix/number
IBTR 2370.)
The techniques for entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise. (3 Lec.)
IBUS 1341 International Purchasing (3)
(This is a WECM course number. Former course prefix/number IBTR 2374.)
Suggested Prerequisite: IBUS 1305. The skills needed by a buyer in international purchasing or sourcing. Topics include the advantages and the barriers of purchasing internationally, global sourcing, and purchasing processes, including issues of contract administration, location, and evaluation of foreign suppliers, total cost approach, exchange fluctuations, customs procedures, and related topics. This course may be repeated for credit. (3 Lec.)

IBUS 1349 International Information Systems (3)
(This is a WECM course number. Former course prefix/number IBTR 2374.)
Suggested Prerequisites: IBUS 1305, Introduction to International Business and Trade, COSC 1401, Microcomputer Concepts and Applications, or higher, ITSC 1401, Introduction to Computers, or higher, or POFI 1345, Integrated Software Applications. A course in managing information systems and technology for multinational corporations. Skill development in the use of appropriate software and the National Trade Data Bank. Topics include global strategic information systems as applied to international E-Commerce, marketing research, problem solving, and current transportation and customs software, such as the Automated Broker Interface. This course may be repeated for credit. Laboratory fee. (3 Lec.)

IBUS 1351 Coordination in Multinational Industries (3)
(This is a WECM course number.)
Suggested Prerequisites: IBUS 1305. Introduction to the essential relationship between domestic and foreign industries engaged in shared production. Topics include economic development through international co-production agreements with governments, technology transfer, labor, legal and financial management factors, and practical applications for such agreements, such as those for Mexican maquiladora operations. This course may be repeated for credit. (3 Lec.)

IBUS 1354 International Marketing Management (3)
(This is a WECM course number. Former course prefix/number IBTR 2371.)
Suggested Prerequisites: IBUS 1305 and MRKG 1311. Analysis of international marketing strategies using trends, costs, forecasting, pricing, sourcing, and distribution factors. Development of an international export/import marketing plan based on the student's research of a firm's direct and indirect global environment. Opportunities for international trade are identified. This course may be repeated for credit. (3 Lec.)

IBUS 1391 Special Topics in International Business (3)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Business, industrial, or service requirements in the international arena will determine specific topics or skill development offered, such as new software packages, regulation updates, or market research information. (3 Lec.)

IBUS 2331 International Human Resource Management (3)
(This is a WECM course number. Former course prefix/number IBTR 2381.)
Suggested Prerequisites: IBUS 1305, IBUS 2341, and HRPO 2301. A study of the effects of the process of internationalization on human resource management including the requirements of local or host-country nationals, expatriates, or parent-country nations, and third-country nationals. Emphasis on Asia-Pacific, Europe, Latin America, and emerging economies. A staffing plan for an international environment including processes from recruitment to evaluation and labor regulations is prepared. This course may be repeated for credit. (3 Lec.)

IBUS 2335 International Business Law (3)
(This is a WECM course number. Former course prefix/number IBTR 2379.)
Suggested Prerequisites: IBUS 1305 and BUSI 2301. A course in law as it applies to international business transactions in the global political-legal environment. Study of interrelationships among laws of different countries and the legal effects on individuals and business organizations. Topics include agency agreements, international contracts and administration, regulation of exports and imports, technology transfers, regional transactions, intellectual property, product liability, and legal organization. This course may be repeated for credit. (3 Lec.)
IBUS 2339 International Banking and Finance (3)
(This is a WECM course number. Former course prefix/number IBTR 2378.)
Suggested Prerequisites: IBUS 1305 and ECON 2301. A course in international monetary systems, financial markets, flow of capital, foreign exchange, and financial institutions. Topics include export-import payments and financing, the preparation of letters of credit, related shipping documentation, and electronic transfers. An introduction to multinational financial decisions, such as financing foreign investment or working capital is provided. This course may be repeated for credit. (3 Lec.)

IBUS 2341 International Comparative Management (3)
Suggested Prerequisites: IBUS 1305, Introduction to International Business and Trade, BMGT 1303, Principles of Management, or HRPO 2307, Organizational Behavior. A study of cross-cultural comparisons of management and communications processes. Emphasis on cultural and geographic distinctions and antecedents that affect individual, group, and organizational behavior. Topics include sociocultural, demographic, economic, technological, and political-legal environments of cluster countries and their relationship to organizational communication and decision making in both the international or multicultural environment. Students will develop a comprehensive IBTR Program portfolio for presentation to prospective employers. This course may be repeated for credit. (3 Lec.)

IBUS 2345 Import Customs Regulations (3)
(This is a WECM course number. Former course prefix/number IBTR 2375.)
Suggested Prerequisites: IBUS 1301, IBUS 1302, and IBUS 1305. A study of the duties and responsibilities of the licensed customs broker or customhouse broker. Topics include processes for customs clearance including appraisement, bonded warehouse entry, examination of goods, harmonized tariffs, fees, bonding penalties, quotas, immediate delivery, consumption, liquidation, computerized systems, laws, and regulations. The student will take sample examinations in preparation for the United States Customs Brokers examination and solve complex problems involving customs regulations and processes. This course may be repeated for credit. (3 Lec.)

IBUS 2366 Practicum-International Business (3)
(This is a WECM course number. Former course prefix/number IBTR 7471.)
Suggested Prerequisites: Nine credit hours in International Business and Trade. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (20 Ext.)

INTERNET PUBLISHING AND E-COMMERCE TECHNOLOGIES

ITNW 1270 Development Platforms for Internet Publishing (2)
(This is a WECM course number. Former course prefix/number WEBT 1270)
Prerequisites: Concurrent enrollment in the Internet Publishing and E-Commerce Program, or demonstrated competence approved by program director. Introduction to hardware, software operating systems used in the development of media and content rich Web sites. Students will compare and contrast various hardware components of computer workstations describing functionality and cross-platform utilization of each component. Students will demonstrate competency using various operating systems in a networked environment. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 1271 Introduction to Internet Publishing Technologies (2)
(This is a WECM course number. Former course prefix/number WEBT 1271)
Prerequisites: Concurrent enrollment in the Internet Publishing and E-Commerce Program, or demonstrated competence approved by program director. This course will review the history, employment possibilities, current trends and societal effects of the digital information age: Project development methodology, internetworking infrastructure, web based client-server systems and various Web development tools will be discussed and demonstrated. Laboratory fee. (1 Lec., 2 Lab.)
ITNW 1272 Basic Design and Imaging for Internet Publishing (2)
(This is a WECM course number. Former course prefix/number WEBT 1271)
Prerequisites: Concurrent enrollment in the Internet Publishing and E-Commerce Program, or demonstrated competence approved by program director. This course provides a general overview of the principles of graphic design with a specific focus on the application of these principles in new media. Image acquisition, manipulation and conversion will be discussed, demonstrated and performed. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 1273 Audio and Video Concepts for Internet Publishing (2)
(This is a WECM course number. Former course prefix/number WEBT 1272)
Prerequisites: Concurrent enrollment in the Internet Publishing and E-Commerce Program, or demonstrated competence approved by program director. The course introduces the student to the processes and tools of audio and video acquisition for embedding and streaming from high performance Web sites. Emphasis is on skill building in the use of VCRs, camcorders, CD-ROMs, audio tape players, digital audio and video editing systems. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 1274 Project Management (2)
(This is a WECM course number. Former course prefix/number WEBT 1281)
Prerequisites: Concurrent enrollment in the Internet Publishing and E-Commerce Program, or demonstrated competence approved by program director. This course provides an introduction to the complexities of managing interactive projects. Students will learn cost specification, budgeting, schedule construction, negotiation, team-building, time management and status reporting skills. Legal issues like intellectual property rights, contract agreements, ethics and confidentiality will be described. (2 Lec.)

ITNW 1275 Content Management for Interactive Publishing (2)
(This is a WECM course number. Former course prefix/number WEBT 1274)
Prerequisites: Successful completion of all Semester I program curricula, and concurrent enrollment in second semester courses, or demonstrated competence approved by program director. This course explores specialized writing and content management requirements of electronic publishing. Emphasis is placed on creating original content in various styles, modifying acquired content from external sources, and designing interactive, nonlinear content appropriate for the intended target audience. Managing customer complaints, negative publicity and using suggestion and feedback from customers to enhance site content will also be covered. (2 Lec.)

ITNW 1276 Digital Graphics and Intermediate Web Site Design (2)
(This is a WECM course number. Former course prefix/number WEBT 1275)
Prerequisites: Successful completion of all Semester I program curricula, and concurrent enrollment in second semester courses, or demonstrated competence approved by the program director. Visual design concepts for new media will be explored using raster and vector based software applications. Digital imaging and illustration projects will utilize advanced color theory, typography, 2D and 3D visual composition and communication techniques. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 1277 Web Site Production Techniques (2)
(This is a WECM course number. Former course prefix/number WEBT 1276)
Prerequisites: Successful completion of all Semester I program curricula, and concurrent enrollment in second semester courses, or demonstrated competence approved by the program director. This course provides in-depth study of the tools required of publishing electronic documents on the World Wide Web. Emphasis is on utilizing HyperText Markup Language (HTML) to construct media rich Web pages for distribution over the Internet. A review of HTML page editors with proficiency in their use is also required. Laboratory fee. (1 Lec., 2 Lab.)
ITNW 1278 2D Digital Animation for Internet Publishing (2)
(This is a WECM course number. Former course prefix/number WEBT 1278)
Prerequisites: Successful completion of all Semester I program curricula, and concurrent enrollment in second semester courses, or demonstrated competence approved by the program director. Introduction to two-dimensional animation techniques used in the production of popular web sites, with an emphasis on using web technologies such as Shockwave and Flash to design lightweight, internet friendly animated content, including interactive menus and web pages. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 1279 Authoring Interactive Web Sites (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I program curricula, and concurrent enrollment in second semester courses, or demonstrated competence approved by the program director. Introduction to the basics of delivering interactive multimedia content over the internet. Concepts such as button states, navigation, visual and auditory feedback, and timing will be covered, followed by a significant introduction to using a scripting language to control interactivity. Emphasis will be placed on using pre-written scripts to streamline the development process. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 1291 Portfolio Development – Internet Publishing and E-Commerce Technologies (2)
(This is a WECM course number. Former course prefix/number WEBT 1283)
Prerequisites: Successful completion of all Semester I and II program curricula, and concurrent enrollment in third semester courses, or demonstrated competence approved by program director. Advanced directed study with development of a media rich, Internet project for corporate or in-house client. Additional topics will include an overview of professional practices required of the workplace like networking, presentation skills and job-seeking techniques. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 1380 Cooperative Education—Internet Publishing and E-Commerce Technologies (3)
(This is a WECM course number. Former course prefix/number WEBT 7371)
Prerequisites: Successful completion of all Semester I, II and III program curricula, and concurrent enrollment in fourth semester courses, or demonstrated competence approved by program director. Students will work either in an off-campus cooperative work arrangement or on a campus production team to create a Web based interactive project. This cooperative education offers college credit for practical work experience related to career goals. (1 Lec., 14 Ext.)

ITNW 2270 Interactive Media and Marketing (2)
(This is a WECM course number. Former course prefix/number WEBT 1280)
Prerequisites: Successful completion of all Semester I and II program curricula, and concurrent enrollment in third semester courses, or demonstrated competence approved by program director. The focus of this course is to familiarize the student with the concepts, strategies, tactics, and metrics of media and marketing concepts in an interactive environment. To accomplish this objective, the student will demonstrate the ability to discuss the components of the interactive marketing mix, develop an executable interactive marketing plan, and reports upon the results. (2 Lec.)

ITNW 2271 Advanced Interactive Web Site Authoring (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I and II program curricula, and concurrent enrollment in third semester courses, or demonstrated competence approved by program director. Advanced introduction to programming interactive multimedia for delivery over the Internet using a scripting language to control interactivity. Multiple levels of scripting will be explored, from simple one-line commands to the writing of custom functions. Students will apply their knowledge by creating advanced interactivity such as games and simulations. Laboratory fee. (1 Lec., 2 Lab.)
ITNW 2272 Fundamentals of Web Server System Administration (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I and II program curricula, and concurrent enrollment in third semester courses, or demonstrated competence approved by program director. An introduction to the requirements of building Web server platforms that provide high-performance, scaleable solutions for delivery of digital content and E-commerce Web sites. Emphasis will be placed on describing basic networking terminology, network functionality, internetworking protocols, network operating systems, directory services, role of network administrator, administering user/group accounts, securing network resources and installing basic web services. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 2273 Introduction to Internet Scripting Languages (2)
(This is a WECM course number. Former course prefix/number WEBT 1370)
Prerequisites: Successful completion of all Semester I and II program curricula, and concurrent enrollment in third semester courses, or demonstrated competence approved by program director. This course serves as an introduction to Internet scripting languages and is designed to teach basic programming skills, methodology, and logic through the use of JavaScript. Emphasis will be placed on applying this knowledge to develop Internet scripts that can be used to make a web site dynamic. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 2274 Fundamentals of Object Oriented Programming (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I and II program curricula, and concurrent enrollment in third semester courses, or demonstrated competence approved by program director. This course introduces fundamental programming concepts utilizing the object-based programming language, Visual Basic. Emphasis is placed on building custom desktop applications from initial flow diagram stage to product deployment. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 2275 Web Server Support and Maintenance (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I, II and III program curricula, and concurrent enrollment in fourth semester courses, or demonstrated competence approved by program director. Continued study of web server system administration with emphasis on supporting and maintaining the web server platform. Topical coverage includes: selecting hardware and network operating systems (NOS), file and partition management, installation and configuration of NOS services, protocol configuration and NOS/web server troubleshooting will be covered. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 2276 Web Server Configuration and Management (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I, II and III program curricula, and concurrent enrollment in fourth semester courses, or demonstrated competence approved by program director. Continued study of web server system administration with emphasis on server configuration and management issues like: port assignments, IP addressing, directory structure, access permissions, MIME type association, web application support, virtual hosting, error messaging, indexing/logging, security features, performance tuning and optimization. Additional Internet services like FTP, SMTP and NNTP will be installed and configured. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 2277 E-Commerce and Design Technologies (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I, II and III program curricula, and concurrent enrollment in fourth semester courses, or demonstrated competence approved by program director. This course focuses on electronic commerce with topical coverage of the following functional areas: business plan integration, design, technologies, software packages, store front development, cryptography, payment methodologies, and measurements, site traffic and sales analysis tools. Laboratory fee. (1 Lec., 2 Lab.)
ITNW 2278 Intermediate Object Programming with Databases (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I, II and III program curricula, and concurrent enrollment in fourth semester courses, or demonstrated competence approved by program director. Introduction to Database design utilizing Visual Basic with focus on the ActiveX Data Objects (ADO) model. Relational database concepts, structured query language (SQL), ActiveX data objects, data form wizard, Microsoft Access and SQL server database engines will be discussed and demonstrated. Laboratory fee. (1 Lec., 2 Lab.)

ITNW 2279 Advanced Internet Scripting Languages (2)
(This is a WECM course number.)
Prerequisites: Successful completion of all Semester I, II and III program curricula, and concurrent enrollment in fourth semester courses, or demonstrated competence approved by program director. This course is a continuation of INET 1233 and is designed to teach advanced programming skills, methodology, and logic through the use of JavaScript, VBScript, and Microsoft Active Server Pages. Emphasis will be placed on creating scripts that provide more complex interactive options for web sites. Laboratory fee. (1 Lec., 2 Lab.)

INTERPRETER TRAINING PROGRAM

SLNG 1111 Fingerspelling (1)
(This is a WECM course number. Former course prefix/number EITP 1170.)
Concurrent enrollment: SLNG 1404. Develops expressive and receptive fingerspelling skills. Receptive skills focus on whole word and phrase recognition as well as reading fingerspelling in context. Expressive skills focus on the development of speed, clarity and fluency. (2 Lab.)

SLNG 1315 Visual/Gestural Communication (3)
(This is a WECM course number. Former course prefix/number EITP 1373.)
Prerequisite: SLNG 1404. A course in the development of skills in non-verbal communications. Emphasizes the use and understanding of facial expression, gestures, pantomime, and body language. Creation or performance of stories using these elements. (3 Lec.)

SLNG 1317 Introduction To The Deaf Community (3)
(This is a WECM course number. Former course prefix/number EITP 1370.)
Prerequisite or concurrent enrollment: ENGL 1301. An overview of the physical, educational, social and cultural implications of deafness and hearing loss within the context of the individual's personal life, family, and community in today's multicultural world. Emphasis on current educational and vocational programs, legislation, technology, and other issues. (3 Lec., 1 Lab.)

SLNG 1321 Introduction To The Interpreting Profession (3)
(This is a WECM course number. Former course prefix/number EITP 1372.)
Prerequisite: SLNG 1317. Concurrent enrollment SLNG 1445. An overview of the field of sign language interpretation. Provides a historical framework for the principles, ethics, roles, responsibilities, and standard practices of the interpreting profession. (3 Lec.)

SLNG 1347 Deaf Culture (3)
(This is a WECM course number. Former course prefix/number EITP 1371.)
Prerequisite: SLNG 1317. Provides a historical and contemporary perspective of American deaf culture using a sociocultural mode. Includes cultural identity, values, group norms, communication, language, and significant contributions made by deaf people to the world. (3 Lec.)

SLNG 1404 American Sign Language (ASL): Beginning I (4)
(This is a WECM course number. Former course prefix/number EITP 1470.)
Prerequisite or concurrent enrollment: ENGL 1301. Concurrent enrollment: SLNG 1111. An introduction to the basic skills in production and comprehension of American Sign Language (ASL). Includes the manual alphabet and numbers. Develops conversational ability, culturally appropriate behaviors and exposes students to ASL grammar. (3 Lec., 2 Lab.)

SLNG 1405 American Sign Language (ASL): Beginning II (4)
(This is a WECM course number. Former course prefix/number EITP 1471.)
Prerequisite: SLNG 1111 and SLNG 1404 with a grade of "C" or better. Develops receptive and expressive ability and allows recognition and demonstration of more sophisticated grammatical features of American Sign Language (ASL). Increases fluency and accuracy in fingerspelling and numbers. Provides opportunities for interaction within the deaf community. (3 Lec., 2 Lab.)
SLNG 1444 American Sign Language (ASL): Intermediate I (4)
(This is a WECM course number. Former course prefix/number EITP 2470.)
Prerequisite: SLNG 1404, SLNG 1405 and ENGL 1301 with a grade of "B" or better. Prerequisite or concurrent enrollment SLNG 1315. Integrates and refines expressive and receptive skills in American Sign Language (ASL), including recognition of sociolinguistic variation. A practice oriented approach to language acquisition, including the use of multimedia. (3 Lec., 2 Lab.)

SLNG 1445 American Sign Language (ASL): Intermediate II (4)
(This is a WECM course number.)
Prerequisite: SLNG 1444. Concurrent enrollment SLNG 1321. An integration of expressive and receptive skills with emphasis on literature, discourse styles, and contextualization at an intermediate level. Provides students with information on idiomatic/colloquial usage for signs and grammatical structures for complex sentences. (3 Lec., 2 Lab.)

SLNG 2301 Interpreting I (3)
(This is a WECM course number. Former course prefix/number EITP 2373.)
Prerequisites: SLNG 1321, SLNG 1345 and SLNG 1445. Concurrent enrollment: SLNG 2302, SLNG 2411 and SPCH 1342. An overview of the interpreting process and current models. Introduces the skills necessary to achieve message equivalency in interpreting. This class emphasizes Sign to Voice interpreting. (3 Lec.)

SLNG 2302 Interpreting II (3)
(This is a WECM course number. Former course prefix/number EITP 2374.)
Prerequisites: SLNG 1321, SLNG 1345 and SLNG 1445. Concurrent enrollment: SLNG 2301, SLNG 2411 and SPCH 1342. Enhancement of interpreting skills and discourse analysis to increasingly complex tasks utilizing simulated interpreting experiences via multimedia materials. Emphasis on skill analysis and peer evaluation. Voice to Sign skills are stressed. (3 Lec.)

SLNG 2371 Transliterating I (3)
(This is a WECM course number. Former course prefix/number EITP 2376.)
Prerequisites: SLNG 2301, SLNG 2302, SLNG 2411 and SPCH 1342. Concurrent enrollment SLNG 2372 (Transliterating II). An overview of the transliterating process and current models. Introduces the skills necessary to achieve message equivalency in transliterating. Sign to Voice skills are emphasized. (3 Lec.)

SLNG 2372 Transliterating II (3)
(This is a WECM course number. Former course prefix/number EITP 2377.)
Prerequisites: SLNG 2301, SLNG 2302, SLNG 2411 and SPCH 1342. Concurrent enrollment SLNG 2371 (Transliterating I). The acts of interpreting and transliterating are compared and contrasted. Transliteration skills and appropriate inclusion of interpreting components will be discussed and practiced. Multimedia materials are used to simulate interpreting experiences. Voice to Sign skills are emphasized. (3 Lec.)

SLNG 2388 Internship – Sign Language Interpreter (3)
(This is a WECM course number. Former course prefix/number EITP 2378.)
Prerequisites: SLNG 2371 and SLNG 2372. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (18 Ext.)

SLNG 2411 Specialized Interpreting/Transliterator (4)
(This is a WECM course number.)
Prerequisite: SLNG 1321, SLNG 1345, and SLNG 1445. Concurrent enrollment: SLNG 2301, SLNG 2302 and SPCH 1342. A focus on interpreting/transliterating with special populations (e.g. deaf/blind, high visual, oral) in special settings (e.g. religious, artistic, medical, legal, mental health). Reinforce basic theories and techniques in relation to the special population(s) and/or settings. (3 Lec., 2 Lab.)

INVASIVE CARDIOLOGY TECHNOLOGY

CVTT 1110 Cardiac Catheterization I (1)
(This is a WECM course number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Focus on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart. (1 Lec.)
CVTT 1153 Catheterization Lab Fundamentals II (1)
(This is a WECM course number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Catheterization Lab Fundamentals I with emphasis on X-ray technology and interventional procedures in the cardiac cath lab. Focus on the beginning cath lab clinical experience. (1 Lec.)

CVTT 1304 Cardiovascular Physiology (3)
(This is a WECM course number.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. A study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Focus on cardiac anatomy, electrocardiology, cardiac hemodynamics, and the innervation of the heart. (3 Lec.)

CVTT 1313 Catheterization Lab Fundamentals I (3)
(This is a WECM course number. Former course prefix/number ICVT 1375.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. Introduction to the diagnostic procedures used in the cath lab. Prior didactic instruction in cardiac physiology and medical instrumentation applied to cath lab procedures including patient preparation and monitoring, angiographic equipment set-up, and the coronary angiography procedure itself. Laboratory fee. (2 Lec., 2 Lab.)

CVTT 1324 Cardiovascular Physiology II (3)
(This is a WECM course number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Cardiovascular Physiology with emphasis on cardiac disease states including methods of hemodynamic data collection and implications in relation to cardiac diseases. (3 Lec.)

CVTT 1350 Cardiac Catheterization II (3)
(This is a WECM course number. Former course prefix/number ICVT 2470.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Cardiac Catheterization I. An intensive study of advanced cardiovascular diagnostic and therapeutic procedures including percutaneous transluminal coronary angioplasty and electrophysiology studies. (3 Lec.)

CVTT 1360 Clinical – Cardiovascular Technology (3)
(This is a WECM course number. Former course prefix/number ICVT 1272.)
Prerequisite: Admission to the Invasive Cardiovascular Technology program with Health Occupations Core Curriculum or prior degree in Health Sciences. A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (15 Ext.)

CVTT 1491 Special Topics in Cardiovascular Technology/Technician (4)
(This is a WECM course number.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (3 Lec., 3 Lab.)

CVTT 2350 Cardiac Catheterization III (3)
(This is a WECM course number. Former course prefix/number ICVT 2471.)
Prerequisite: A grade of "C" or better in all CVTT and support courses. A continuation of Cardiac Catheterization II with emphasis on areas of opportunity outside the cath lab including non-invasive cardiology, cardiac surgical procedures, and hospital administration as related to the cath lab. Assistance for the student in role transition from student to cath lab employee. This class contains the capstone experience for the Allied Health Imaging - Invasive Cardiovascular Technology program. (3 Lec.)

CVTT 2460 Clinical – Cardiovascular Technology (4)
(This is a WECM course number. Former course prefix/number ICVT 2670.)
A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (24 Ext.)
A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (24 Ext.)

ITALIAN

ITAL 1411 Beginning Italian I (4)
(This is a common course number.)
This course focuses on basic conversation, grammar, reading and writing. Students will be introduced to Italian culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609025131)

ITAL 1412 Beginning Italian II (4)
(This is a common course number.)
Prerequisite: Italian 1411 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Italian 1411. Conversation, grammar, reading and writing are continued. Students will continue to study Italian culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609025131)

ITAL 2311 Intermediate Italian I (3)
(This is a common course number.)
Prerequisite: Italian 1411 and 1412 or the equivalent or demonstrated competence approved by the instructor. Reading, writing and intense oral practice are covered. Grammar is reviewed and expanded. The study of Italian culture is continued. (3 Lec.)
(Coordinating Board Academic Approval Number 1609025231)

ITAL 2312 Intermediate Italian II (3)
(This is a common course number.)
Prerequisite: Italian 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Italian 2311. Reading, writing and intense oral practice are continued. Grammar is reviewed and expanded. The study of Italian culture is continued. (3 Lec.)
(Coordinating Board Academic Approval Number 1609025231)

JAPANESE

JAPN 1311 Beginning Japanese (3)
(This is a common course number.)
This course is an introduction to Japanese speaking, comprehension, reading, writing and grammar. Cultural insights are also presented. Emphasis is on pronunciation, comprehension, and oral expression. It is strongly recommended that students who plan to study Japanese for more than one semester enroll in Japanese 1411 which includes an extra hour of lab per week (and an extra hour of credit for the course). Students who successfully complete Japanese 1311 and wish to continue their studies of Japanese may register for Japanese 1412. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1603025131)

JAPN 1411 Beginning Japanese (4)
(This is a common course number. Former course prefix/number JPN 101)
This course focuses on basic conversation, reading, and writing. Students will also be introduced to Japanese culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603025131)

JAPN 1412 Beginning Japanese (4)
(This is a common course number. Former course prefix/number JPN 102)
Prerequisite: Japanese 1411 or the equivalent. This course is a continuation of Japanese 1411. Conversation, reading, and writing are continued. Students will continue study of Japanese culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1603025131)

JAPN 2311 Intermediate Japanese (3)
(This is a common course number. Former course prefix/number JPN 201)
Prerequisite: Japanese 1411 and Japanese 1412 or the equivalent. Reading, writing, and intense oral practice are covered. Japanese language structures, vocabulary and the phonetic system are reviewed. The study of culture and institutions is continued. (3 Lec.)
(Coordinating Board Academic Approval Number 1603025231)

JAPN 2312 Intermediate Japanese (3)
(This is a common course number. Former course prefix/number JPN 202)
Prerequisite: Japanese 2311 or the equivalent. This course is a continuation of Japanese 2311. Reading, writing, and intense oral practice are continued. (3 Lec.)
(Coordinating Board Academic Approval Number 1603025231)
JOURNALISM

NOTE: These courses carry a Dallas County Community College prefix of "JOUR"; however, most can be identified by a Common Course Number for transfer evaluation purposes. Both are listed in the course descriptions.

JOUR 1129 Student Publications (1)
(Former course prefix/number JN 106. The common course number is COMM 1129)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 2311 or 2315. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015426)

JOUR 1307 Introduction To Mass Communications (3)
(Former course prefix/number JN 101. The common course number is COMM 1307)
This course surveys the field of mass communications. Emphasis is on the role of mass media in modern society. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035126)

JOUR 1335 Survey Of Broadcasting (3)
(Former course prefix/number JN 203. The common course number is COMM 1335)
This course stresses broadcast organization and operations and includes the theoretical and historical aspects of broadcasting. It introduces students to the social, political, technical and economic aspects of the broadcasting industry. (3 Lec.)
(Coordinating Board Academic Approval Number 0904035226)

JOUR 2129 Student Publications (1)
(Former course prefix/number JN 104. The common course number is COMM 2129)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 2311 or 2315. Individual staff assignments are made for the student newspaper. Assignments may be made in writing, advertising, photography, cartooning, or editing. Students are required to work at prescribed periods under supervision and must attend staff meetings. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015426)

JOUR 2130 Student Publications (1)
(Former course prefix/number JN 105. The common course number is COMM 2130)
Prerequisite: Demonstrated competence approved by the instructor. This course may not be taken for credit concurrently with Journalism 2311 or 2315. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 0904015426)

JOUR 2309 News Editing And Copy Reading (3)
(Former course prefix/number JN 204. The common course number is COMM 2309)
Prerequisite: Journalism 2311. This course focuses on editing news for newspaper, radio, and television. Emphasis is on writing headlines and laying out pages. (3 Lec.)
(Coordinating Board Academic Approval Number 0904015326)

JOUR 2311 News Gathering And Writing (3)
(Former course prefix/number JN 102. The common course number is COMM 2311)
Prerequisite: Typing ability. This course focuses upon recognizing newsworthy events, gathering information and writing the straight news story. It provides a basis for future study in newspaper and magazine writing, advertising, broadcast journalism and public relations. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0904015726)

JOUR 2315 News Gathering And Writing II (3)
(Former course prefix/number JN 103. The common course number is COMM 2315)
Prerequisite: Journalism 2311 or professional experience approved by the instructor. This course is a continuation of Journalism 2311. Students study and practice writing more complex stories, such as features, profiles, follow-up stories, and sidebars. Students are required to write for the campus newspaper. (2 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 0904016826)

JOUR 2327 Principles Of Advertising (3)
(Former course prefix/number JN 202. The common course number is COMM 2327)
Fundamentals of advertising, including advertising appeals, print and broadcast copy writing, and design and selection of media will be covered. Typography as it relates to advertising is stressed. The course will provide students with the concepts they will need to go into the advertising field and into advanced advertising courses. (3 Lec.)
(Coordinating Board Academic Approval Number 0902015126)
LIBRARY SKILLS

LIBR 1370 College Library Research Methods and Materials (3)
(Former course prefix/number LS 102)
This course is a survey of college research methodologies and materials with emphasis on search strategies appropriate for college-level research in the undergraduate disciplines, the structure and assessment of information sources within society, and the organization of academic libraries. Attention will also be given to the formal presentation of research results, including models of academic writing, bibliographic preparation and documentation standards. (3 Lec.)
(Coordinating Board Academic Approval Number 2501019112. This is a unique need course.)

MANAGEMENT

BMGT 1191 Special Topics in Business Administration and Management, General (1)
(This is a WECM course number. Former course prefix/number MGMT 2170.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec.)

BMGT 1301 Supervision (3)
(This is a WECM course number. Former course prefix/number MGMT 1374.)
A study of the role of the supervisor. Managerial functions as applied to leadership, counseling, motivation, and human skills are examined. (3 Lec.)

BMGT 1303 Principles of Management (3)
(This is a WECM course number. Former course prefix/number MGMT 1370.)
Concepts, terminology, principles, theory, and issues that are the substance of the practice of management. (3 Lec.)

BMGT 1313 Principles of Purchasing (3)
(This is a WECM course number. Former course prefix/number CMGT 2370 or MGMT 1373.)
The purchasing process as it relates to such topics as inventory control, price determination, vendor selection, negotiation techniques, and ethical issues. (3 Lec.)

BMGT 1382 Cooperative Education - Business Administration and Management, General (3)
(This is a WECM course number. Former course prefix/number MGMT 7371.)
The student should have previous credit in or concurrent enrollment in BMGT 1301 or demonstrated competence approved by the instructor. Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 14 Ext.)

BMGT 1383 Cooperative Education - Business Administration and Management, General (3)
(This is a WECM course number. Former course prefix/number MGMT 7372.)
The student should have previous credit in or concurrent enrollment in HRPO 2301 or demonstrated competence approved by the instructor. Career related activities encountered in the student’s area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 14 Ext.)

BMGT 1391 Special Topics in Business Administration and Management, General (3)
(This is a WECM course number. Former course prefix/number MGMT 2372.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)

BMGT 2303 Problem Solving and Decision Making (3)
(This is a WECM course number. Former course prefix/number MGMT 2375.)
Decision making and problem solving processes in organizations, utilizing logical and creative problem solving techniques. Application of theory is provided by experiential activities such as small group discussions, case studies, and the use of other managerial decision aids. (3 Lec.)
BMGT 2331 Total Quality Management (3)
(This is a WECM course number. Former course prefix/number MGMT 1371.)
Quality of productivity in organizations. Includes planning for quality throughout the organization, analysis of costs of quality, and employee empowerment. (3 Lec.)

BMGT 2382 Cooperative Education - Business Administration And Management, General (3)
(This is a WECM course number. Former course prefix/number MGMT 8381.)
The student should have previous credit in or concurrent enrollment in HRPO 2307 or demonstrated competence approved by the instructor. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 14 Ext.)

BMGT 2383 Cooperative Education - Business Administration And Management, General (3)
(This is a WECM course number. Former course prefix/number MGMT 8382.)
The student should have previous credit in or concurrent enrollment in BMGT 2303 or demonstrated competence approved by the instructor. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 14 Ext.)

BUSG 1315 Small Business Operations (3)
(This is a WECM course number. Former course prefix/number MGMT 2371.)
A course in the unique aspects of managing a small business. Topics address management functions including how managers plan, exercise leadership, organize, and control the operations. (3 Lec.)

BUSG 1341 Small Business Financing (3)
(This is a WECM course number. Former course prefix/number MGMT 2370.)
A study of the financial structure of a small business. Topics address business finance, including where the funds come from and what they are used for; budgeting including planning and preparing, record keeping, taxation, insurance, and banking. (3 Lec.)

BUSG 2309 Small Business Management (3)
(This is a WECM course number. Former course prefix/number MGMT 1372.)
A course on how to start and operate a small business. Topics include facts about a small business, essential management skills, how to prepare a business plan, financial needs, marketing strategies, and legal issues. (3 Lec.)

HRPO 2301 Human Resources Management (3)
(This is a WECM course number. Former course prefix/number MGMT 2374.)
Behavioral and legal approaches to the management of human resources in organizations. (3 Lec.)

HRPO 2307 Organizational Behavior (3)
(This is a WECM course number. Former course prefix/number MGMT 2373.)
The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. (3 Lec.)

MARKETING CAREERS

BMGT 1302 Principles Of Retailing (3)
(This is a WECM course number. Former course prefix/number MRKT 1370.)
Introduction to the retailing environment and its relationship to consumer demographics, trends, and traditional/nontraditional retailing markets. The employment of retailing techniques and the factors that influence modern retailing. (3 Lec.)

BMGT 1333 Principles Of Selling (3)
(This is a WECM course number. Former course prefix/number MRKT 2373.)
Introduction to the selling process and its application to all forms of sales. Identification of the elements of the communication process between buyers and sellers in business and examination of the legal regulations and ethical issues of business which effect salespeople. (3 Lec.)

BMGT 1349 Advertising And Sales Promotion (3)
(This is a WECM course number. Former course prefix/number MRKT 2374.)
Introduction to the advertising principles, practices, and multi-media of persuasive communication including buyer behavior, budgeting, and regulatory constraints. (3 Lec.)
BMGT 1371 Customer Service (3)
(This is a local need course number. Former course prefix/number MRKT 2382.)
Introduction to the basic tenets of quality customer service and its role in marketing; focus on the development of a customer service culture, understanding of customers' needs and expectation, the necessity of a customer service information system and the creation of customer service strategies. (3 Lec.) Coordinating Board Academic Approval Number to be assigned.

FSHD 1233 Fashion Study Tour (2)
(This is a WECM course number. Former course prefix/number MRKT 2371.)
A course which combines the study of fashion with travel. Exploration of fashion, art, architecture, textiles, costume, business, and cultural activities in major art and fashion cities. Examination of the most current work in the industry from a global perspective. (2 Lec.)

FSHD 1302 Introduction To Fashion (3)
(This is a WECM course number. Former course prefix/number MRKT 2380.)
Survey of the world of fashion businesses. Introduction to the creation and merchandising of fashion through the study of fashion vocabulary, the fashion process, fashion publications, and career opportunities. (3 Lec.)

FSHD 1308 Fashion Trends (3)
(This is a WECM course number. Former course prefix/number MRKT 2381.)
A study of the effects of eastern and western cultures on the development of fashion. Examination of the relationship of social, psychological, economic, demographic, and lifestyle trends to fashion trends. (3 Lec.)

FSHD 1318 Apparel Computer Systems (3)
(This is a WECM course number. Former course prefix/number MRKT 2372.)
An introduction to apparel computer systems used in wholesale and retail fashion businesses. Applications demonstrated include computer-aided garment and textile design, fashion illustration, pattern-making, pattern grading, marker making, newsletters, brochures, advertisements, and catalogs. Laboratory fee. (2 Lec., 2 Lab.)

FSHN 1191 Special Topics In Apparel And Accessories Marketing Operations, General (1)
(This is a WECM course number. Former course prefix/number MRKT 2170.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec.)

FSHN 1212 Apparel And Accessories Marketing Operations (2)
(This is a WECM course number.)
An overview of fashion trends and concepts, history, economic influences, trade vocabulary, retailing, marketing, textiles, merchandise display, and visual concepts. Topics include developing a marketing plan for apparel and accessory products and examination of job opportunities available in apparel and accessories marketing. (2 Lec.)

FSHN 1291 Special Topics In Apparel and Accessories Marketing Operations, General (2)
(This is a WECM course number. Former course prefix/number MRKT 2270.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (2 Lec.)

FSHN 1301 Textiles (3)
(This is a WECM course number. Former course prefix/number DESI 1370 or DESI 1371.)
A general study of textiles with emphasis on factors that affect the hand, appearance, and performance in clothing use. Examination of the properties of natural and man-made fibers, how yarn is formed, methods of production, and the properties of a wide variety of fabrics. Application of textiles used in the apparel industry. Laboratory fee. (2 Lec., 2 Lab.)

FSHN 1342 Visual Merchandising (3)
(This is a WECM course number. Former course prefix/number MRKT 2376.)
Skill development in the creation of showroom or retail store window/interior displays that sell merchandise. Study of the basic techniques of store planning, mannequin dressing, alternate form design, and display space conceptualization and implementation. Laboratory fee. (2 Lec., 2 Lab.)

FSHN 1366 Practicum (or Field Experience) – Fashion Merchandising (3)
(This is a WECM course number.)
Suggested Prerequisite: Completion of two courses in Fashion Marketing or demonstrated competence approved by the instructor. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)
FSHN 1382 Cooperative Education - Fashion Merchandising (3)
(This is a WECM course number. Former course prefix/number MRKT 7371.)
Suggested Prerequisite: Completion of two courses in Fashion Marketing or demonstrated competence approved by the instructor. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

FSHN 2303 Fashion Buying (3)
(This is a WECM course number. Former course prefix/number MRKT 2377.)
Fundamentals of fashion buying with instruction in planning, pricing, and purchasing retail fashion inventories. Identification of wholesale merchandise and media resources. (3 Lec.)

FSHD 2310 Fabric Design (3)
(This is a WECM course number.)

FSHN 2366 Practicum (or Field Experience) - Fashion Merchandising (3)
(This is a WECM course number.)
Suggested Prerequisite: Completion of two courses in Fashion Marketing or demonstrated competence approved by the instructor. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

MRKG 1311 Principles of Marketing (3)
(This is a WECM course number. Former course prefix/number MRKT 2370.)
Introduction to basic marketing functions, identification of consumer and organizational needs, explanation of economic, psychological, sociological, and global issues, and description and analysis of the importance of marketing research. (3 Lec.)

MRKG 1366 Practicum (or Field Experience) - Business Marketing and Marketing Management (3)
(This is a WECM course number.)
Suggested Prerequisite: Completion of two courses in Business Marketing or demonstrated competence approved by the instructor. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

MRKG 1381 Cooperative Education - Business Marketing And Marketing Management (3)
(This is a WECM course number. Former course prefix/number MRKT 7371.)
Suggested Prerequisite: Completion of two courses in Business Marketing or demonstrated competence approved by the instructor. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)
MRKG 2366 Practicum (or Field Experience) - Business Marketing and Marketing Management (3)
(This is a WECM course number.)
Suggested Prerequisite: Completion of two courses in Business Marketing or demonstrated competence approved by the instructor. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

MRKG 2381 Cooperative Education - Business Marketing And Marketing Management (3)
(This is a WECM course number. Former course prefix/number MRKT 7372.)
Suggested Prerequisite: Previous credit in MRKG 1381, or completion of two courses in Business Marketing or demonstrated competence approved by the instructor. Career related activities encountered in the students' area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

MATHEMATICS
(See Developmental Mathematics also. Supplementary instruction in mathematics is available through the learning center.)

The following MATH courses meet the requirements for Core Curriculum EXCEPT: MATH 1335, TECM 1303, TECM 1317, TECM 1341, TECM 1349 and POFT 1321.

MATH 1314 is a 3 credit hour lecture course. MATH 1414 is a 4 credit hour lecture course. Either course will meet degree requirements.

MATH 1314 College Algebra (3)
(This is a common course number. Former course prefix/number MTH 101)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015437)

MATH 1316 Plane Trigonometry (3)
(This is a common course number. Former course prefix/number MTH 102)
Prerequisite: Mathematics 1314 or Mathematics 1414 or equivalent, or approval of instructor. This course is a study of angular measures, functions of angles, identities, solutions of triangles, equations, inverse trigonometric functions, and complex numbers. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015337)

MATH 1324 Mathematics For Business And Economics I (3)
(This is a common course number. Former course prefix/number MTH 111)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course includes equations, inequalities, matrices, linear programming; linear, quadratic, polynomial, rational, exponential, and logarithmic functions; and probability. Applications to business and economics problems are emphasized. (3 Lec.)
(Coordinating Board Academic Approval Number 2703015237)
MATH 1325 Mathematics For Business And Economics II (3)
(This is a common course number. Former course prefix/number MTH 112)
Prerequisite: Mathematics 1324, MATH 1314 or MATH 1414. This course includes limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)
(Coordinating Board Academic Approval Number 2703015237)

MATH 1332 College Mathematics I (3)
(This is a common course number. Former course prefix/number MTH 115)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. Designed for liberal arts students, this course includes the study of sets, logic, sets of numbers, and mathematical systems. Additional topics will be selected from mathematics of finance, introduction to computers, introduction to statistics, and introduction to matrices. Recreational and historical aspects of selected topics are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015137)

MATH 1333 College Mathematics II (3)
(This is a common course number. Former course prefix/number MTH 116)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. Designed for liberal arts students, this course includes the study of algebra, linear programming, permutations, combinations, probability, and geometry. Recreational and historical aspects of selected topics are also included. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015137)

MATH 1335 Fundamental Concepts Of Mathematics For Elementary Teachers (3)
(This is a common course number. Former course prefix/number MTH 117)
Prerequisites: Two years of high school algebra and an appropriate assessment test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course includes the structure of the real number system and geometry. Emphasis is on the development of mathematical reasoning needed for elementary teachers. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015137)

MATH 1342 Introductory Statistics (3)
(This is a common course number. Former course prefix/number MTH 202)
Prerequisite: Two years of high school algebra and an appropriate test score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course is a study of collection and tabulation of data, bar charts, graphs, sampling, measures of central tendency and variability, correlation, index numbers, statistical distributions, probability, and application to various fields. (3 Lec.)
(Coordinating Board Academic Approval Number 2705015137)

MATH 1348 Analytic Geometry (3)
(This is a common course number. Former course prefix/number MTH 121)
Prerequisite: Mathematics 1316 or equivalent. This course is a study of the real numbers, distance, the straight line, conics, transformation of coordinates, polar coordinates, parametric equations, and three-dimensional space. (3 Lec.)
(Coordinating Board Academic Approval Number 2701015537)

MATH 1414 Introductory Statistics (3)
(This is a common course number. Former course prefix/number MTH 114)
Prerequisite: Mathematics 1324, MATH 1314 or MATH 1414. This course includes limits, differential calculus, integral calculus, and appropriate applications. (3 Lec.)
(Coordinating Board Academic Approval Number 2703015237)

MATH 1414 College Algebra (4)
(Former course prefix/number MTH 103)
Prerequisites: Two years of high school algebra and an appropriate assessment score or Developmental Mathematics 0099 or Developmental Mathematics 0093. This course is a study of relations and functions including polynomial, rational, exponential, logarithmic, and special functions. Other topics include complex numbers, systems of equations and inequalities, theory of equations, progressions, the binomial theorem, proofs, and applications. (4 Lec.)
(Coordinating Board Academic Approval Number 2701015437)

MATH 2305 Discrete Mathematics (3)
(Former course prefix/number MTH 215)
Prerequisites: Mathematics 2513 and an introductory programming course. This course is a study of sets, algebraic structures (relations, functions, groups, and Boolean Algebra), combinatorics, graphs, logic, algorithms, and applications to computing devices. (3 Lec.)
(Coordinating Board Academic Approval Number 2703017119)
MATH 2315 Calculus III (3)  
(This is a common course number. Former course prefix/number MTH 226)  
Prerequisite: Mathematics 2414 or equivalent. This course is a study of topics in vector calculus, functions of several variables, and multiple integrals, with applications. (3 Lec.)  
(Coordinating Board Academic Approval Number 2701015937)

MATH 2318 Linear Algebra (3)  
(This is a common course number. Former course prefix/number MTH 221)  
Prerequisite: Mathematics 2513 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformations. (3 Lec.)  
(Coordinating Board Academic Approval Number 2701016137)

MATH 2320 Differential Equations (3)  
(This is a common course number. Former course prefix/number MTH 230)  
Prerequisite: Mathematics 2414 or demonstrated competence approved by the instructor. This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications. (3 Lec.)  
(Coordinating Board Academic Approval Number 2703015137)

MATH 2412 Precalculus Mathematics (4)  
(This is a common course number. Former course prefix/number MTH 109)  
Prerequisites: An appropriate assessment test score and either high school pre-AP precalculus or trigonometry, or Mathematics 1316. This course consists of the study of algebraic and trigonometric topics including polynomial, rational, exponential, logarithmic and trigonometric functions and their graphs. Conic sections, polar coordinates, and other topics of analytic geometry will be included. (4 Lec.)  
(Coordinating Board Academic Approval Number 2701015837)

MATH 2414 Calculus II (4)  
(This is a common course number. Former course prefix/number MTH 225)  
Prerequisite: Mathematics 2513 or equivalent. This course is a study of techniques of integration, polar coordinates, parametric equations, topics in vector calculus, sequences, series, indeterminate forms, and partial differentiation with applications. (4 Lec.)  
(Coordinating Board Academic Approval Number 2701015937)

MATH 2418 Linear Algebra (4)  
(This is a common course number. Former course prefix/number MTH 221)  
Prerequisite: Mathematics 2513 or equivalent. This course is a study of matrices, linear equations, dot products, cross products, geometrical vectors, determinants, n-dimensional space, and linear transformations. (4 Lec.)  
(Coordinating Board Academic Approval Number 2701016137)

MATH 2420 Differential Equations (4)  
(This is a common course number. Former course prefix/number MTH 230)  
Prerequisite: Mathematics 2414 or demonstrated competence approved by the instructor. This course is a study of ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, boundary value problems, and applications. (4 Lec.)  
(Coordinating Board Academic Approval Number 2703015137)

MATH 2513 Calculus I (5)  
(This is a common course number. Former course prefix/number MTH 124)  
Prerequisite: Mathematics 2412 or Mathematics 1348 or equivalent. This course is a study of limits, continuity, derivatives, and integrals of algebraic and transcendental functions, with applications. (5 Lec.)  
(Coordinating Board Academic Approval Number 2703015137)

POFT 1321 Business Math (3)  
(This is a WECM course number. Former course prefix/number MTH 130JMATH1371)  
Instruction in the fundamentals of business mathematics including analytical and problem-solving skills for critical thinking in business applications. (3 Lec.)  
(Coordinating Board Academic Approval Number 2701015937)

TECM 1303 Technical Mathematics (3)  
(This is a WECM course number. Former course prefix/number MTH 136/MATH 1372/MATH 1373)  
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)  
(Coordinating Board Academic Approval Number 2702015137)

TECM 1317 Technical Trigonometry (3)  
(This is a WECM course number. Former course prefix/number MTH 196/MATH 1375)  
Suggested prerequisite of TECM 1341. Study of triangular measurement and calculation in technical applications. Presentation of trigonometry ratio, solution of right triangles, oblique triangles, and vector analysis as used in industrial applications. (3 Lec.)
TECM 1341 Technical Algebra (3)
(This is a WECM course number. Former course prefix/number MTH 195/MATH 1374)
Suggested prerequisite of one year of high school algebra and an appropriate assessment test score or Developmental Mathematics 0097 or Developmental Mathematics 0091 or equivalent. Application of algebra to technical occupations. Topics include principles of linear equations, simultaneous equations, and manipulation of powers and roots. Emphasis on stated word problems relevant to technical and vocation occupations. (3 Lee.)

TECM 1349 Technical Math Applications (3)
(This is a WECM course number. Former course prefix/number MTH 297/MATH 2370)
Suggested prerequisite of TECM 1317. Fundamentals of trigonometry and geometry as used in a variety of technical settings. Topics include the use of plane and solid geometry to solve areas and volumes encountered in industry. (3 Lee.)

MEDICAL ASSISTING

MDCA 1201 Human Disease/Pathophysiology (2)
(This is a WECM course number. Former course prefix/number MEDA 1271.)
Corequisite: MDCA 1313. A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs and symptoms of common diseases of all body systems. (2 Lee.)

MDCA 1205 Medical Law and Ethics (2)
(This is a WECM course number. Former course prefix/number MEDA 1270.)
Prerequisite: GED or High School Diploma and admission to program. Instruction in principles, procedures, and regulations involving legal and ethical relationships among physicians, patients, and medical assistants. Includes current ethical issues as they relate to the practice of medicine and fiduciary responsibilities. (2 Lee.)

MDCA 1216 Procedures in a Clinical Setting (2)
(This is a WECM course number. Former course prefix/number MEDA 1275.)
Prerequisite: MDCA 1313, MDCA 1205 and MDCA 1201. Emphasis on patient-centered assessment, examination, intervention, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, minor surgical procedures, and other treatments as appropriate for the medical office. Laboratory fee. (1 Lec., 2 Lab.)

MDCA 1217 Procedures in a Clinical Setting (2)
(This is a WECM course number. Former course prefix/number MEDA 1276.)
Prerequisite: MDCA 1216, MDCA 1313 and MDCA 1201. Emphasis on patient-centered assessment, examination, intervention, and treatment as directed by physician. Includes vital signs, collection and documentation of patient information, asepsis, minor surgical procedures, and other treatments as appropriate for the medical office. Laboratory fee. (1 Lec., 2 Lab.)

MDCA 1247 Pharmacology and Administration of Medications (2)
(This is a WECM course number. Former course prefix/number MEDA 1280.)
Prerequisite: MDCA 1216 and MDCA 1313. Instruction in concepts and application of pharmacological principles. Focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculation of drug problems, and medico-legal responsibilities of the medical assistant. Laboratory fee. (1 Lec., 2 Lab.)

MDCA 1251 Medical Assistant Laboratory Procedures (2)
(This is a WECM course number. Former course prefix/number MEDA 1277.)
Prerequisite: MDCA 1313 and MDCA 1201. Emphasis on common laboratory procedures performed in the physician's office or clinical setting. Includes blood collection, specimen handling, basic urinalysis, identification of normal ranges, and electrocardiography. Laboratory fee. (1 Lec., 2 Lab.)

MDCA 1313 Medical Terminology (3)
(This is a WECM course number. Former course prefix/number MEDA 1370.)
Prerequisite: GED or High School Diploma and admission to program. A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms. (3 Lee.)

MDCA 1421 Administrative Procedures (4)
(This is a WECM course number. Former course prefix/number MEDA 1270 and MEDA 1273)
Prerequisite: MDCA 1313, MDCA 1201. A course in medical office procedures, including appointment scheduling, medical records creation and maintenance, phone communications, transcriptions, coding, billing, collecting, third party reimbursement, credit arrangements, and use of computer in the medical office. (4 Lee.)
MDCA 1443 Medical Insurance (4)
(This is a WECM course number. Former course prefix/number MEDA 1279.)
Prerequisite: MDCA 1313 and MDCA 1201. Emphasizes accurate ICD-9 and CPT coding of office procedures for payment/reimbursement by patient or third party. Additional topics may include managed care or medical economics. Laboratory fee. (4 Lec.)

MDCA 2388 Internship - Medical Assistant (3)
(This is a WECM course number. Former course prefix/number MEOA 1274 and MEOA 1278.)
Prerequisite: Successful completion of all courses in the Medical Assisting Curriculum. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This is an unpaid experience. (3 Ext.)

MRMT 1192 Special Topics in Medical Transcription (1)
(This is a WECM course number. Former course prefix/number MEDA 1272.)
Prerequisite: MDCA 1313, MDCA 1201, and program admission or instructor approval. Fundamental use of dictation equipment, medical office reports, and creating medical records. Students will learn to spell and use medical terminology appropriately. Laboratory fee. (2 Lab.)

MRMT 1211 Computers in Health Care (2)
(This is a WECM course number. Former course prefix/number MEDA 1172.)
Prerequisite: Typing speed of 30 wpm. Introduction to the concepts of computer technology related to health care and the tools and techniques for collecting, storing and retrieving health care data. Laboratory fee. (1 Lec., 2 Lab.)

MEDICAL LABORATORY TECHNOLOGY

MLAB 1167 Practicum (or Field Experience)-Medical Laboratory Technician/Technology (1)
(This is a WECM course number. Former course prefix/number MDLT 1171.)
Prerequisite: MLAB 1415 with a minimum grade of a "C". Practical General training and experiences in the workplace. The college and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student’s general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (8 Ext.)

MLAB 1335 Immunology/Serology (3)
(This is a WECM course number. Former course prefix/number is MDLT 2371.)
Prerequisite: Acceptance in the Medical Laboratory Technology Program. An introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures. Laboratory fee. (2 Lec., 2 Lab.)

MLAB 1415 Hematology (4)
(This is a WECM course number. Former course prefix/number is MDLT 1470.)
Prerequisite: Acceptance into the Medical Laboratory Technology Program with completion of Biology 2401 or Biology 1470 and English 1301. Introduction to theory and practical application of routine and special hematology procedures, both manual and automated; red blood cells and white blood cells maturation sequences, and normal and abnormal morphology and associated diseases. Laboratory fee. (3 Lec., 4 Lab.)

MLAB 2266 Practicum (or Field Experience)-Medical Laboratory Technician/Technology (2)
(This is a WECM course. Former course prefix/number is MDLT 2272.)
Prerequisite: Completion of MLAB 2501 with a minimum grade of "C". Practical general training and experiences in the workplace. The college and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student’s general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (14 Ext.)
MLAB 2267 Practicum (or Field Experience)-Medical Laboratory Technician/Technology (2)
(This is a WECM course. Former course prefix/number is MDLT 2273.)
Prerequisite: Completion of MLAB 2331 and MLAB 2434 with a minimum grade of "C". Practical general training and experiences in the workplace. The college and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (20 Ext.)

MLAB 2331 Immunohematology (3)
(This is a WECM course. Former course prefix/number is MDLT 2372.)
Prerequisite: Acceptance into the Medical Laboratory Technology Program. A study of blood antigens and antibodies. Performance of routine blood banking procedures, including blood group and Rh typing, antibody screens, antibody identification, cross matching, elution, and absorption techniques. This course contains the capstone experience for the program. Laboratory fee. (2 Lec., 4 Lab.)

MLAB 2434 (Clinical) Microbiology (4)
(This is a WECM course. Former course prefix/number is MDLT 2473.)
Prerequisite: Acceptance into the Medical Laboratory Technology Program. Instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, setup, identification, susceptibility testing, and reporting procedures. Laboratory fee. (3 Lec., 4 Lab.)

MLAB 2501 (Clinical) Chemistry (5)
(This is a WECM course. Former course prefix/number is MDLT 2570.)
Prerequisite: CHEM 1411 and CHEM 1412 with a minimal grade of a "C" and acceptance into the Medical Laboratory Technology Program. An introduction to the principles and procedures of various tests performed on Clinical Chemistry. Presents the physiological basis for the test, the principle and procedure for the test, and the clinical significance of the test results, including quality control and normal values. Also includes basic chemical laboratory technique, chemical laboratory safety, electrolytes and acid-base balance, proteins, carbohydrate, lipids, enzymes, metabolites, endocrine function, and toxicology. The study of urines and body fluids is extensively studied with this course as well. Laboratory fee. (4 Lec., 4 Lab.)

MEDICAL STAFF SERVICES

HPRS 1270 Legal and Ethical Aspects of Health Care (2)
(This is a WECM course number. Former course prefix number MEDS 1270.)
Focus of this course is on the legal processes and ethical aspects affecting health care. Exposure to legal terminology and statutes, as well as ethical decision making is provided. Confidentiality, consent, patient rights, liability and negligence will be covered. (2 Lec.)

HPRS 1370 Medical Staff Services I (3)
(This is a WECM course number. Former course prefix/number MEDS 1370.)
This introductory course covers the fundamental concepts, principles and organization of the Medical Staff Office in a healthcare organization. The role of the office, organization of health care facilities, credentialing of medical staff and allied health practitioners, staff appointments, privilege delineation, monitoring and documenting procctoring, peer review, medical management, and preparing agendas and minutes are covered. (3 Lec.)

HPRS 2270 Performance Improvement (2)
(This is a WECM course number. Former course prefix/number MEDS 2270.)
Performance improvement efforts in health care are the focus of this course. Quality assessment techniques, utilization review, medical staff peer review and risk management are covered. The roles and responsibilities of individuals involved in performance improvement are also included. (2 Lec.)

HPRS 2370 Medical Staff Services II (3)
(This is a WECM course number. Former course prefix/number MEDS 1371.)
Prerequisite: HPRS 1370 Medical Staff Services I. This course is a continuation of Medical Staff Services 1370, covering the process of meeting standards of the Joint Commission on the Accreditation of Health Care Organizations (JCAHO), National Committee for Quality Assurance (NCQA), state licensure laws and other regulatory requirements. (3 Lec.)

HPRS 2371 Medical Staff Services Directed Study (3)
(This is a WECM course number. Former course prefix/number MEDS 2370.)
Prerequisite: All Medical Staff Services courses. This course combines productive work experience with academic study. The student, employer, and instructor will develop a written competency-based learning plan with learning objectives. Emphasis is on developing organizational and problem-solving skills. (1 Lec., 20 Ext.)
MEDICAL TRANSCRIPTION

HITT 2331 Medical Terminology- Advanced (3)  
(This is a WECM course number. Former course prefix/number 2270)  
Prerequisite: MDCA 1313. The student will identify, spell, and pronounce advanced medical terms; use advanced medical terms in context; construct and analyze advanced medical terms; and use medical references as resource tools. (3 Lec.)

MDCA 1201 Human Disease/Pathophysiology (2)  
(This is a WECM course number. Former course prefix/number MEDT 1270, MEDA 1272.)  
A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs and symptoms of common diseases of all body systems. (2 Lec.)

MDCA 1202 Human Disease/Pathophysiology (2)  
(This is a WECM course number. Former course prefix/number MEDT 1274.)  
Prerequisite: MDCA 1201. A study of anatomy and physiology with emphasis on human pathophysiology, including etiology, prognosis, medical treatment, signs and symptoms of common diseases of all body systems. (2 Lec.)

MDCA 1205 Medical Law and Ethics (2)  
(This is a WECM course number.)  
Instruction in principles, procedures, and regulations involving legal and ethical relationships among physicians, patients, and medical assistants. Includes current ethical issues as they relate to the practice of medicine and fiduciary responsibilities. (2 Lec.)

MDCA 1313 Medical Terminology (3)  
(This is a WECM course number. Former course prefix/number MEDT 1372.)  
A study and practical application of a medical vocabulary system. Includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms. (3 Lec.)

MRMT 1292 Special Topics in Medical Transcription (2)  
(This is a WECM course number. Former course prefix/number MEDT 1273)  
Prerequisite: MRMT 1307, Intermediate Medical Transcription. Application of learned transcription fundamentals and utilization of references in the production of intermediate level reports of physician dictation with development of speed and accuracy. Laboratory fee. (1 Lec., 3 Lab.)

MRMT 1307 Medical Transcription Fundamentals (3)  
(This is a WECM course number. Former course prefix/number MEDT 1371)  
Prerequisite: Admission to Medical Transcription or Medical Assistant program or instructor approval. Fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Utilizes transcribing and information processing equipment compatible with industry standards. Designed to develop speed and accuracy. Laboratory fee. (2 Lec., 2 Lab.)

MRMT 1382 Cooperative Education - Medical Transcription (3)  
(This is a WECM course number. Former course prefix/number MEDT 1373.)  
Prerequisite: MRMT 2433 or concurrent enrollment. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 16 Ext.)

MRMT 2433 Advanced Medical Transcription (4)  
(This is a WECM course number. Former course prefix/number MEDT 2370)  
Prerequisite: MRMT 1292. Production of advanced reports of physician dictation with increasing speed and accuracy including history and physicals, consultations, discharge summaries, operative reports, and other medical reports. Laboratory fee. (2 Lec., 4 Lab.)

MILITARY SCIENCE

(Offered in cooperation with the University of Texas at Arlington. Registration for these courses is through Mountain View College.)

MILS 1180 Leadership Laboratory (1)  
(Former course prefix/number MIL 102)  
A practical laboratory of applied leadership and skills. Student-planned, -organized and -conducted training, oriented toward leadership development. Laboratory topics include marksmanship, small unit tactics, multi-tiered programs focused on individual skill levels. Uniform and equipment provided, no fee. May be repeated for credit. (3 Lab.)
MILS 1241 Introduction to ROTC and the Army (2)
(Former course prefix/number MIL 100)
The military organization with emphasis on tradition, doctrine, and contribution to national objectives. Consideration of techniques to improve study habits and time management. Concurrent enrollment in MILS 1180 mandatory. (2 Lec.)

MILS 1242 Introduction to Leadership (2)
(Former course prefix/number MIL 101)
Introduction to the concept of officership as a profession. Questions of war, morality, ethics, values, and leadership. Consideration of study and time management techniques useful in becoming a master student. Concurrent enrollment in MILS 1180 mandatory. (2 Lec.)

MILS 2241 Military Topography (2)
(Former course prefix/number MIL 200)
The leader's interpretation and use of topographical maps to facilitate land navigation. Consideration of the military significance of terrain. Emphasizes practical land navigation, map reading, terrain analysis, and leadership skills. Concurrent enrollment in MILS 1180 mandatory. (2 Lec.)

MILS 2248 Evolution of Contemporary Military Strategy (2)
(Former course prefix/number MIL 202)
A review of contemporary military conflicts. Selected battles from World War II, Korea, Vietnam, and the Yom Kippur War are examined for impact upon current U.S. military doctrine, strategy, and weapons systems. All military science students must enroll or participate in MILS 1180 concurrently with this course unless exception is given by the PMS. (2 Lec.)

MILS 2291 Conference Course (2)
(Former course prefix/number MIL 203)
Prerequisite: permission of the PMS. Independent study. Designed to supplement the military science curricula by a student's concentrated study in a narrower field of military skill or subject matter. May be repeated for credit. Does not count for PE credit. (2 Lec.)

MILS 2351 Self/Team Development (3)
(Former course prefix/number MIL 204)
Introduction to planning, organizing, and leading small unit offensive and defensive operations. Consideration of the principles of leadership, the principles of war, the decision-making process, and military correspondence. Concurrent enrollment in MILS 1180 mandatory. (3 Lec.)

MILS 2352 Individual/Team Military Tactics (3)
(Former course prefix/number MIL 205)
Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security, and pre-execution checks. Concurrent enrollment in Military Science 1180 mandatory, plus optional participation in physical fitness and a weekend exercise. (3 Lec.)

MORTGAGE BANKING

BNKG 1353 Mortgage Lending (3)
(This is a WECM course number. Former course prefix/number MOBA 1372.)
Overview of the mortgage lending market and process. Emphasis on documentation, credit evaluation, federal regulation, and state laws related to mortgage loans. (3 Lec.)

BNKG 1357 Investor Accounting (3)
(This is a WECM course number. Former course prefix/number MOBA 2373.)
An introduction to accounting and investor reporting functions that relate to the financial aspects of servicing mortgages that are in the first or second position. Topics include custodial and remittance accounting methods, reporting procedures, and rules for establishment of a custodial account. (3 Lec.)
BNKG 1358 Secondary Market (3)
(This is a WECM course number. Former course prefix/number MOBA 2372.)
A study of the purpose of the secondary mortgage market and its history. Included are secondary market conduits, review of the basic strategies used in the selling of closed real estate mortgages into the secondary market, conventional and governmental segments, mortgage-backed securities and bonds, regulatory requirements, GNMA mortgage-backed securities, preparing and completing loans for sale, and servicing sold loans. Other topics included are institutional and non-institutional lenders, types of mortgages, and alternative mortgage instruments.
(3 Lec.)

BNKG 1381 Cooperative Education-Banking and Financial Support Services (3)
(This is a WECM course number. Former course prefix/number MOBA 7471.)
Completion of two core Mortgage Banking courses, concurrent enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of mortgage banking fundamentals which may include finance, law, lending practices, government regulations and servicing.
(1 Lec., 20 Lab.)

BNKG 1382 Cooperative Education-Banking and Financial Support Services (3)
(This is a WECM course number. Former course prefix/number MOBA 7472.)
Completion of two core Mortgage Banking courses, concurrent enrollment in a core or related course or instructor approval. This course combines productive work experience with academic study. The student, employer and instructor will develop a written competency-based learning plan with varied learning objectives and work experiences. Students must develop new learning objectives each semester. The seminar consists of the development of a personalized on-the-job training plan and discussions with field experts on the application of mortgage banking fundamentals which may include finance, law, lending practices, government regulations and servicing.
(1 Lec., 20 Lab.)

BNKG 1391 Special Topics in Banking and Financial Support Services (3)
(This is a WECM course number. Former course prefix/number MOBA 1373.)
This course provides the student with comprehensive training in mortgage loan closing with an in-depth study of title commitments/policies, engineer’s survey, deed restrictions, and various documents (legal and other) used for residential mortgage loans. (3 Lec.)

BNKG 1392 Special Topics in Banking and Financial Support Services (3)
(This is a WECM course number. Former course prefix/number MOBA 2370.)
This specialized course examines how mortgage lenders handle loans from the time a loan is closed until the final payment is made. The course focuses on the legal aspects and actual procedures used in the daily operations of the loan servicing function. Topics include escrow accounting, contract servicing, governmental regulations, taxing authorities and establishing tax rates and economic impacts of delinquency. (3 Lec.)

BNKG 1393 Special Topics in Banking and Financial Support Services (3)
(This is a WECM course number. Former course prefix/number MOBA 2374.)
This course is designed to provide in-depth training for all facets of risk analysis and collateral review pertaining to analyzing the risk and determining the credit grade of the sub-prime mortgage loan. Topics covered in-depth will include, but are not limited to, grading the credit to determine the level of grade, analyzing and evaluating documentation to determine credit risk and analyzing the collateral to determine risk of collateral value. (3 Lec.)

RELE 1301 Principles of Real Estate (3)
(This is a WECM course number. Former course prefix/number REAL 1370.)
An overview of licensing as a real estate broker and salesperson, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. (3 Lec.)
RELE 1319 Real Estate Finance (3)
(This is a WECM course number. Former course prefix/number REAL 1371.)
An overview of the U.S. monetary system, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative instruments, laws affecting mortgage lending, and the State Housing Agency. (3 Lec.)

RELE 1324 Loan Origination and Quality Control (3)
(This is a WECM course number. Former course prefix/number MOBA 1170 or MOBA 1370.)
An introduction to the mortgage loan application process. Topics include regulatory compliance and documentation; real estate contracts; the mortgage application process, interview techniques; credit, income and property qualification, quality controls and procedures. (3 Lec.)

RELE 1325 Real Estate Mathematics (3)
(This is a WECM course number. Former course prefix/number REAL 1378.)
Mathematical logic and basic arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration, and estimation of closing statement. (3 Lec.)

MULTIMEDIA TECHNOLOGY

ARTC 1345 3-D Modeling and Rendering (3)
(This is a WECM course number. Former course prefix/number MULT 2371.)
Suggested Prerequisite: IMED 1301. A studio course in the theory and technique of three-dimensional (3-D) modeling utilizing appropriate software. Topics include the creation and modification of 3-D geometric shapes; a variety of rendering techniques; and use of camera light sources, texture, and surface mapping. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 1353 Computer Illustration (3)
(This is a WECM course number. Former course prefix/number MULT 1375.)
Suggested Corequisite: IMED 1301. Exploration of computer programs with applications to illustration, photo manipulation and file management for reproduction. Emphasis on concept development in print and digital delivery. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1191 Special Topics in Educational/Institutional Media Technology/Technician (1)
(This is a WECM course number. Former course prefix/number MULT 1170.)
Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student. (1 Lec.)

IMED 1291 Special Topics in Educational/Institutional Media Technology/Technician (2)
(This is a WECM course number. Former course prefix/number MULT 2270.)
Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student. Laboratory fee. (1 Lec., 2 Lab.)

IMED 1301 Introduction to Multimedia (3)
(This is a WECM course number. Former course prefix/number MULT 1370.)
A survey of the theories, elements, and hardware/software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, web page development, and interactive presentations. Course emphasis is on conceptualizing and producing effective multimedia presentations. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1305 Multimedia Authoring I (3)
(This is a WECM course number. Former course prefix/number MULT 1373.)
Suggested Corequisites: IMED 1301 and PHTC 1349. Instruction in multimedia development with an icon based development tool. Topics include interactivity, branching, navigation, and interface/information design using industry-standard authoring software. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1316 Web Page Design I (3)
(This is a WECM course number. Former course prefix/number MULT 1377.)
Suggested Prerequisites: IMED 1301 and PHTC 1349. Instruction in Internet web page design and related graphic design issues including mark-up languages, web sites, Internet access software, and interactive topics. Laboratory fee. (2 Lec., 4 Lab.)
IMED 1341  2-D Interface Design  (3)  
(This is a WECM course number.)
Suggested Prerequisite: IMED 1316. Skill development in the interface design process including selecting interfaces that are meaningful to users and relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1345 Interactive Multimedia I  (3)  
(This is a WECM course number. Former course prefix/number MULT 1382.)
Suggested Corequisites: IMED 1301 and PHTC 1349. Exploration of the use of graphics and sound to create time-based interactive multimedia animations using industry standard authoring software. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1351 Digital Video  (3)  
(This is a WECM course number. Former course prefix/number MULT 1371.)
Suggested Corequisite: IMED 1301. Skill development in producing and editing video and sound for multimedia productions. Emphasis is placed on the capture, editing, and outputting of video using a desktop digital video workstation. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1391 Special Topics in Educational/ Institutional Media Technology/Technician  (3)  
(This is a WECM course number. Former course prefix/number MULT 1381 and MULT 2375.)
Topics address recently identified current events, skills, knowledge, and attitudes or behaviors pertinent to multimedia technology or occupations in the field. Focus is on concepts relevant to the professional development of the student. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2305 Multimedia Authoring II  (3)  
(This is a WECM course number. Former course prefix/number MULT 1374.)
Suggested Prerequisites: IMED 1305. In-depth coverage of programming/scripting using an icon-based authoring system with emphasis on advanced development of interactive multimedia products. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2311 Portfolio Development  (3)  
(This is a WECM course number. Former course prefix/number MULT 1380.)
Suggested Prerequisite: IMED 2313. Emphasis on preparation and enhancement of portfolio to meet professional standards. Topics also include professional organizations, presentation skills, and job-seeking techniques. Departmental approval required for enrollment. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2313 Project Analysis and Design  (3)  
(This is a WECM course number. Former course prefix/number MULT 1379.)
Prerequisite: Completion of two semesters of multimedia coursework. Introduction to the multimedia planning process including costing, preparation, production legal issues, and guidelines for pre-production preparation. Creation of a comprehensive design document including target audience analysis, purpose and goals, objectives, content outline, flow chart, and storyboard. Emphasis is placed on content design and production management. This is the capstone class for the Level I multimedia certificate. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2315 Web Page Design II  (3)  
(This is a WECM course number. Former course prefix/number MULT 1378.)
Suggested Prerequisite: IMED 1316. A study of hypertext mark-up language (HTML) and interesting layout techniques for creating engaging well designed web pages. Emphasis is on identifying the target audience and producing a web site according to physical and technical limitations, cultural appearance, and legal issues. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2345 Interactive Multimedia II  (3)  
(This is a WECM course number. Former course prefix/number MULT 2370.)
Suggested prerequisite: IMED 1345. Instruction in the use of scripting language to create time-based interactive multimedia projects. Topics include building a user interface, writing script, using commands and functions, testing, and debugging. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2349 Internet Communications  (3)  
(This is a WECM course number. Former course prefix/number MULT 2372.)
Suggested prerequisites: IMED 2315. Advanced seminar in web server design and maintenance. Topics include scripting, web site planning, testing, security, production, and marketing. Topics include developments in the field of Internet communications. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2351 Multimedia Programming  (3)  
(This is a WECM course number. Former course prefix/number MULT 2373.)
Suggested prerequisites: IMED 2305 and IMED 2345. Advanced topics in multimedia programming including the use of custom scripts for data tracking. Emphasis is on developing multimedia programs customized to the client's needs. Laboratory fee. (2 Lec., 4 Lab.)
IMED 2388 Internship-Educational/Instructional Media Technology/Technician (3)
(This is a WECM course number. Former course prefix/number MULT 7371.)
Prerequisite: Completion of the Level I Multimedia Certificate. An experience external to the college for an advanced student in the field of interactive media. The internship involves a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (15 Ext.)

ITSE 2313 Web Authoring (3)
(This is a WECM course number.)
Suggested prerequisite: IMED 2349. Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and advanced authoring tools. Laboratory fee. (2 Lec., 4 Lab.)

PHTC 1349 Photo Digital Imaging I (3)
(This is a WECM course number. Former course prefix/number MULT 1383.)
Suggested corequisite: IMED 1301. Instruction in the computer as an electronic darkroom. Topics include color and gray scale images and image conversion and presentation. Laboratory fee. (2 Lec., 4 Lab.)

PHTC 2349 Photo Digital Imaging II (3)
(This is a WECM course number. Former course prefix/number MULT 2374.)
Suggested corequisite: PHTC 1349. Continued skill development in the use of the computer for retouching, copying, photographic restoration, color correction, data importation, composite imaging, and background dropout and replacement. Laboratory fee. (2 Lec., 4 Lab.)

MUSIC

MUAP 1101-1181 Applied Music-Minor (1)
This course is open to students enrolled in music theory, ensembles, and other music major and minor courses. It provides private instruction in the student's secondary area and consists of a one-half hour lesson a week. Private music may be repeated for credit. Laboratory fee required. (1 Lec.)

MUAP 1101 Applied Music-Violin (1)
(This is a common course number. Former course prefix/number MUS 124)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1105 Applied Music-Viola (1)
(This is a common course number. Former course prefix/number MUS 125)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1109 Applied Music-Cello (1)
(This is a common course number. Former course prefix/number MUS 126)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1113 Applied Music-Double Bass (1)
(This is a common course number. Former course prefix/number MUS 127)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1115 Applied Music-Electric Bass (1)
(This is a common course number. Former course prefix/number MUS 141)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1117 Applied Music-Flute (1)
(This is a common course number. Former course prefix/number MUS 128)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1121 Applied Music-Oboe (1)
(This is a common course number. Former course prefix/number MUS 129)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1125 Applied Music-Bassoon (1)
(This is a common course number. Former course prefix/number MUS 131)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1129 Applied Music-Clarinet (1)
(This is a common course number. Former course prefix/number MUS 130)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1133 Applied Music-Saxophone (1)
(This is a common course number. Former course prefix/number MUS 132)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1137 Applied Music-Trumpet (1)
(This is a common course number. Former course prefix/number MUS 133)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1141 Applied Music-French Horn (1)
(This is a common course number. Former course prefix/number MUS 134)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1145 Applied Music-Trombone (1)
(This is a common course number. Former course prefix/number MUS 135)
(Coordinating Board Academic Approval Number 5009035430)
MUAP 1149 Applied Music-Baritone (1)
(This is a common course number. Former course prefix/number MUS 136)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1153 Applied Music-Tuba (1)
(This is a common course number. Former course prefix/number MUS 137)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1157 Applied Music-Percussion (1)
(This is a common course number. Former course prefix/number MUS 138)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1158 Applied Music-Drum Set (1)
(This is a common course number. Former course prefix/number MUS 143)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1161 Applied Music-Guitar (1)
(This is a common course number. Former course prefix/number MUS 140)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1165 Applied Music-Organ (1)
(This is a common course number. Former course prefix/number MUS 122)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1169 Applied Music-Piano (1)
(This is a common course number. Former course prefix/number MUS 121)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1177 Applied Music-Harp (1)
(This is a common course number. Former course prefix/number MUS 139)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 1181 Applied Music-Voice (1)
(This is a common course number. Former course prefix/number MUS 123)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2201-2281 Applied Music-Concentration (2)
This course is open to students enrolled in music theory, ensembles, or other music major and minor courses. It provides private instruction in the area of the student's concentration and consists of one hour of instruction per week. Private music may be repeated for credit. Laboratory fee required. (1 Lec.)

MUAP 2201 Applied Music-Violin (2)
(This is a common course number. Former course prefix/number MUS 224)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2205 Applied Music-Viola (2)
(This is a common course number. Former course prefix/number MUS 225)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2209 Applied Music-Cello (2)
(This is a common course number. Former course prefix/number MUS 226)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2213 Applied Music-Double Bass (2)
(This is a common course number. Former course prefix/number MUS 227)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2215 Applied Music-Electric Bass (2)
(This is a common course number. Former course prefix/number MUS 241)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2217 Applied Music-Flute (2)
(This is a common course number. Former course prefix/number MUS 228)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2221 Applied Music-Oboe (2)
(This is a common course number. Former course prefix/number MUS 229)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2225 Applied Music-Bassoon (2)
(This is a common course number. Former course prefix/number MUS 231)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2229 Applied Music-Clarinet (2)
(This is a common course number. Former course prefix/number MUS 230)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2233 Applied Music-Saxophone (2)
(This is a common course number. Former course prefix/number MUS 232)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2237 Applied Music-Trumpet (2)
(This is a common course number. Former course prefix/number MUS 233)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2241 Applied Music-French Horn (2)
(This is a common course number. Former course prefix/number MUS 234)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2245 Applied Music-Trombone (2)
(This is a common course number. Former course prefix/number MUS 235)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2249 Applied Music-Baritone (2)
(This is a common course number. Former course prefix/number MUS 236)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2253 Applied Music-Tuba (2)
(This is a common course number. Former course prefix/number MUS 237)
(Coordinating Board Academic Approval Number 5009035430)
MUAP 2257 Applied Music-Percussion (2)
(This is a common course number. Former course prefix/number MUS 238)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2258 Applied Music-Drum Set (2)
(This is a common course number. Former course prefix/number MUS 243)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2261 Applied Music-Guitar (2)
(This is a common course number. Former course prefix/number MUS 240)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2265 Applied Music-Organ (2)
(This is a common course number. Former course prefix/number MUS 222)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2269 Applied Music-Piano (2)
(This is a common course number. Former course prefix/number MUS 221)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2277 Applied Music-Harp (2)
(This is a common course number. Former course prefix/number MUS 239)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2281 Applied Music-Voice (2)
(This is a common course number. Former course prefix/number MUS 223)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2301-2381 Applied Music-Major (3)
This course is primarily for music performance majors and is open to students enrolled in music theory, ensembles, or other music major and minor courses. It provides private instruction in the area of the student's major instrument and consists of one hour of instruction per week. This course may be repeated for credit. Laboratory fee. (1 Lec.)

MUAP 2301 Applied Music-Violin (3)
(This is a common course number. Former course prefix/number MUS 254)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2305 Applied Music-Viola (3)
(This is a common course number. Former course prefix/number MUS 255)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2309 Applied Music-Cello (3)
(This is a common course number. Former course prefix/number MUS 256)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2313 Applied Music-Double Bass (3)
(This is a common course number. Former course prefix/number MUS 257)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2317 Applied Music-Flute (3)
(This is a common course number. Former course prefix/number MUS 258)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2321 Applied Music-Oboe (3)
(This is a common course number. Former course prefix/number MUS 259)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2325 Applied Music-Bassoon (3)
(This is a common course number. Former course prefix/number MUS 261)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2329 Applied Music-Clarinet (3)
(This is a common course number. Former course prefix/number MUS 260)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2333 Applied Music-Saxophone (3)
(This is a common course number. Former course prefix/number MUS 262)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2337 Applied Music-Trumpet (3)
(This is a common course number. Former course prefix/number MUS 263)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2341 Applied Music-French Horn (3)
(This is a common course number. Former course prefix/number MUS 264)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2345 Applied Music-Trombone (3)
(This is a common course number. Former course prefix/number MUS 265)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2349 Applied Music-Baritone (3)
(This is a common course number. Former course prefix/number MUS 266)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2353 Applied Music-Tuba (3)
(This is a common course number. Former course prefix/number MUS 267)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2357 Applied Music-Percussion (3)
(This is a common course number. Former course prefix/number MUS 268)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2361 Applied Music-Guitar (3)
(This is a common course number. Former course prefix/number MUS 270)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2365 Applied Music-Organ (3)
(This is a common course number. Former course prefix/number MUS 269)
(Coordinating Board Academic Approval Number 5009035430)
MUAP 2369 Applied Music-Piano (3)
(This is a common course number. Former course prefix/number MUS 251)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2377 Applied Music-Harp (3)
(This is a common course number. Former course prefix/number MUS 269)
(Coordinating Board Academic Approval Number 5009035430)

MUAP 2381 Applied Music-Voice (3)
(This is a common course number. Former course prefix/number MUS 253)
(Coordinating Board Academic Approval Number 5009035430)

MUSB 1305 Survey of the Music Business (3)
(This is a WECM course number. Former course prefix/number MUSI1377.)
An overview of the music industry including songwriting, live performances, the record industry, music merchandising, contracts and licenses, and career opportunities. (3 Lec.)

MUSB 1380 Cooperative Education – Music Business Management and Merchandising (3)
(This is a WECM course number. Former course prefix/number MUSI 7371.)
Career related activities encountered in the students’ area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)

MUSC 1303 History of Popular Music (3)
(This is a WECM course number. Former course prefix/number MUSI 1374.)
A study of commercial music industry trends and developments through historical analysis. Topics include the evolution of the music industry with emphasis on the development of popular musical styles and the impact of culture and technology on industry growth. (3 Lec.)

MUSC 1327 Audio Engineering I (3)
(This is a WECM course number. Former course prefix/number MUSI 1272.)
An overview of the modern recording studio and related personnel. Topics include basic studio electronics and acoustic principles, wave form analysis, microphone concepts and miking techniques, studio set up and signal flow, recording console theory, signal processing concepts, tape machine principles and operation, and an overview of mixing and editing. (2 Lec., 3 Lab.)

MUSC 1331 Musical Instrument Digital Interface (MIDI) I (3)
(This is a WECM course number. Former course prefix/number MUSI 1271.)
An overview of Musical Instrument Digital Interface (MIDI) systems and applications. Topics include the history and evolution of MIDI, hardware requirements, computer numbering systems, channels and modes, the MIDI language, and typical implementation of MIDI applications in the studio environment using software-based sequencing programs. (2 Lec., 2 Lab.)

MUSC 2141 Forum/Recital (1)
(This is a WECM course number. Former course prefix/number MUSI 9175.)
Stylistic analysis of commercial music performances presented by students, faculty, and guest artists. This course may be repeated if topics and learning outcomes vary. (2 Lab.)

MUSC 2314 Improvisation Theory I (3)
(This is a WECM course number. Former course prefix/number MUSI 1375.)
A study of the chordal structures of jazz, rock, country, and fusion with emphasis on extemporaneous performance. (3 Lec.)

MUSC 2319 Orchestration (3)
(This is a WECM course number. Former course prefix/number MUSI 2370.)
Exploration of writing for voices and instruments to include ranges, transposition, and idiosyncrasies of each instrument with emphasis on commercial music chord voicings. (3 Lec.)

MUSC 2355 Musical Instrument Digital Interface (MIDI) II (3)
(This is a WECM course number. Former course prefix/number MUSI 2270.)
Prerequisite: MUSC 1331 or demonstrated competence, approved by the instructor. A continuation of MIDI I with emphasis on advanced sequencer operation, and SMPTE-based synchronization in the interaction of multiple recording and playback systems. (2 Lec., 2 Lab.)

MUSC 2427 Audio Engineering II (4)
(This is a WECM course number. Former course prefix/number MUSI 1273.)
Prerequisites: MUSC 1327. A continuation of Audio Engineering I with emphasis on implementation of the techniques and theories of the recording process. Topics include applications of microphones, the audio console, the multi-track tape recorder, and signal processing devices in recording session environments. (3 Lec., 3 Lab.)
MUSE 2447 Audio Engineering III (4)
(This is a WECM course number. Former course prefix/number MUSI 2372.)
Prerequisites: MUSE 2427. Presentation of advanced procedures and techniques utilized in recording and manipulating audio information. Topics include advanced computer-based console automation, hard disk based digital audio editing, nonlinear digital multi-track recording, and advanced engineering project completion. (3 Lec., 3 Lab.)

MUSE 2448 Audio Engineering IV (4)
(This is a WECM course number. Former course prefix/number MUSI 2373.)
Prerequisite: MUSE 2447. Examination of the role of the producer including recording, mixing, arranging, analyzing projects, session planning, communication, budgeting, business aspects, technical considerations, and music markets. (3 Lec., 3 Lab.)

MUSI 1116 Musicianship I (1)
(This is a common course number. Former course prefix/number MUS 161)
Prerequisite: Music 1300 and 1371 or demonstrated competence approved by the instructor. Keyboard skills and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 1311 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045630)

MUSI 1117 Musicianship II (1)
(This is a common course number. Former course prefix/number MUS 162)
Prerequisite: Music 1116. This course is a continuation of Music 1116. It is recommended that students enrolled in Music 1312 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045630)

MUSI 1123 Orchestra (1)
(This is a common course number. Former course prefix/number MUS 170)
Prerequisite: Demonstrated competence approved by the instructor. Experience is provided in performing and reading orchestral literature and in participating in the college orchestra. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035530)

MUSI 1125 Jazz Ensemble (1)
(This is a common course number. Former course prefix/number MUS 184)
Prerequisite: Demonstrated competence approved by the instructor. The jazz ensemble rehearses and performs a variety of jazz styles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035530)

MUSI 1126 Band (1)
(This is a common course number. Former course prefix/number MUS 160/MUSI 1237)
Prerequisite: Demonstrated competence approved by the instructor. The band studies and performs a wide variety of music in all areas of band literature. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035530)

MUSI 1132 Keyboard Ensemble (1)
(This is a common course number. Former course prefix/number MUS 174)
Prerequisite: Demonstrated competence approved by the instructor. A group of keyboard instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1133 Woodwind Ensemble (1)
(This is a common course number. Former course prefix/number MUS 171)
Prerequisite: Demonstrated competence approved by the instructor. A group of woodwind instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1134 Brass Ensemble (1)
(This is a common course number. Former course prefix/number MUS 172)
Prerequisite: Demonstrated competence approved by the instructor. A group of brass instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1137 Guitar Ensemble (1)
(This is a common course number. Former course prefix/number MUS 103)
Music composed and arranged for a guitar ensemble is performed. Works for a guitar and a different instrument or for guitar and a voice are also included. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1138 Percussion Ensemble (1)
(This is a common course number. Former course prefix/number MUS 173)
Prerequisite: Demonstrated competence approved by the instructor. A group of percussion instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

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MUSI 1139 String Ensemble (1)
(This is a common course number. Former course prefix/number MUS 175)
Prerequisite: Demonstrated competence approved by the instructor. A group of string instrumentalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1140 Symphonic Wind Ensemble (1)
(This is a common course number. Former course prefix/number MUS 176)
Prerequisite: Demonstrated competence approved by the instructor. In the symphonic wind ensemble, students study and perform stylistic literature of all periods. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1143 Vocal Ensemble (1)
(This is a common course number. Former course prefix/number MUS 155)
Prerequisite: Demonstrated competence approved by the instructor. Activities include study and performance of specialized choral literature suitable for more advanced students. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035630)

MUSI 1151 Chamber Ensemble (1)
(This is a common course number. Former course prefix/number MUS 177)
Prerequisite: Demonstrated competence approved by the instructor. A group of chamber instrumentalists or vocalists read and perform literature for small ensembles. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035730)

MUSI 1152 Madrigal Singers (1)
(This is a common course number. Former course prefix/number MUS 156)
A group of vocalists read and perform literature for small ensembles. Membership is by audition with the appropriate director. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035830)

MUSI 1160 Italian Diction (1)
(This is a common course number. Former course prefix/number MUS 105)
The phonetic sounds of the Italian language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)

MUSI 1161 English Diction (1)
(This is a common course number. Former course prefix/number MUS 108)
The phonetic sounds of the English language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)

MUSI 1170 Synthesizer Class I (1)
(Former course prefix/number MUS 147)
Prerequisite: Music 1181 or prior keyboard experience. This course is an entry-level performance course designed to teach students the basic theoretical concepts and performance skills necessary to perform on synthesizers. (3 Lab.)
(Coordinating Board Academic Approval Number 5009037126)

MUSI 1172 Synthesizer Class II (1)
(Former course prefix/number MUS 148)
Prerequisite: Music 1170 or prior music synthesizer experience. This course is a continuation of Music 1170. This course emphasizes the rehearsal and performance of commercial music styles. FM synthesis is introduced and a variety of programmable equipment is surveyed including drum machines, sequencers, digital samplers and computer software. (3 Lab.)
(Coordinating Board Academic Approval Number 5009037126)

MUSI 1181 Piano Class I (1)
(This is a common course number. Former course prefix/number MUS 117)
This course is primarily for students with no piano background. It develops basic musicianship and piano skills. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 1182 Piano Class II (1)
(This is a common course number. Former course prefix/number MUS 118)
Prerequisite: Music 1181 or demonstrated competence approved by the instructor. The study of piano is continued. Included are technique, harmonization, transposition, improvisation, accompanying, sight reading, and performing various styles of repertoire. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 1183 Voice Class I (1)
(This is a common course number. Former course prefix/number MUS 151)
This course is for non-voice majors. It presents the principles of breathing, voice production, tone control, enunciation, and phrasing in two group lessons a week. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085130)
MUSI 1184 Voice Class II (1)
(This is a common course number. Former course prefix/number MUS 152)
This course is a continuation of Music 1183. It is open to all non-voice majors. Emphasis is on solo singing, appearance in studio recital, stage deportment, and personality development. Two group lessons are given a week. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085130)

MUSI 1192 Guitar Class I (1)
(This is a common course number. Former course prefix/number MUS 119)
This course is primarily for students with limited knowledge in reading music or playing the guitar. It develops basic guitar skills. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009035130)

MUSI 1193 Guitar Class II (1)
(This is a common course number. Former course prefix/number MUS 120)
Prerequisite: Music 1192 or demonstrated competence approved by the instructor. This course is a continuation of Music 1192. Emphasis is on classical guitar techniques and music reading skills. This course may be repeated for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 5009035130)

MUSI 1263 Jazz Improvisation (2)
(This is a common course number. Former course prefix/number MUS 115)
The art of improvisation is introduced. Basic materials, aural training, analysis, and common styles are presented. This course may be repeated for credit. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 5009036530)

MUSI 1300 Foundations Of Music I (3)
(This is a common course number. Former course prefix/number MUS 113)
This course is the initial course to prepare students with limited music training for Music 1311. It focuses on notation (music reading), musical terminology, analysis, listening to and creating rhythmic and melodic responses. (3 Lec.)
(Coordinating Board Academic Approval Number 500904530)

MUSI 1304 Foundations Of Music II (3)
(This is a common course number. Former course prefix/number MUS 114)
Prerequisite: Music 1300 or demonstrated competence approved by the instructor. This course prepares students with limited music training for Music 1311 and increases their general music understanding. Emphasis is on rhythmic and melodic training, chord functions, melody, textures, and basic analysis of music. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045430)
MUSI 1312 Music Theory II (3)
(This is a common course number. Former course prefix/number MUS 146)
Prerequisite: Music 1311 or demonstrated competence approved by the instructor. This course focuses on part-writing and harmonization with triads and their inversions. Also included is a chord vocabulary expanded to include materials from the common practice period as well as contemporary periods. It is recommended that students enrolled in Music 1117 enroll in this course. (3 Lee.)
(Coordinating Board Academic Approval Number 5009045130)

MUSI 1370 Guitar Literature And Materials (3)
(Former course prefix/number MUS 112)
The body of music for the guitar is surveyed. Emphasis is on the repertoire of instruments in the guitar family, such as the lute. Transcription and arranging are studied as well as the selection of a program for public performance. (3 Lec.)
(Coordinating Board Academic Approval Number 5009025230)

MUSI 1372 Digital Music Production (3)
(Former course prefix/number MUS 153)
Prerequisite: One semester of music theory and keyboard or demonstrated competence approved by the instructor. This course is designed to introduce major/non-major music students to the MIDI technology as an extension of the music theory/keyboards curriculum. Various MIDI devices, computer hardware, and computer software will be explored. This course may be repeated for credit. (2 Lee., 1 Lab.)
(Coordinating Board Academic Approval Number 5009035630.)

MUSI 1373 Digital Music Production (3)
(Former course prefix/number MUS 154)
Prerequisite: Successful completion of Music 1372 or demonstrated competence approved by the instructor. This course is a continuation of Music 1372 and will present advanced concepts in music production. This course may be repeated for credit. (2 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 5009045130.)

MUSI 1386 Composition (3)
(This is a common course number. Former course prefix/number MUS 203)
Prerequisites: Music 1311 and 1312 or demonstrated competence approved by the instructor. This course covers composing in small forms for simple media in a variety of styles. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045330)

MUSI 2116 Musicianship III (1)
(This is a common course number. Former course prefix/number MUS 271)
Prerequisite: Music 1116 and 1117 or demonstrated competence approved by the instructor. Keyboard and aural skills (including sight-singing and ear training) are developed. It is recommended that students enrolled in Music 2311 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045730)

MUSI 2117 Musicianship IV (1)
(This is a common course number. Former course prefix/number MUS 272)
Prerequisite: Music 2116 or demonstrated competence approved by the instructor. This course is a continuation of Music 2116. It is recommended that students enrolled in Music 2312 enroll in this course. (3 Lab.)
(Coordinating Board Academic Approval Number 5009045730)

MUSI 2127 Lab Band (1)
(This is a common course number. Former course prefix/number MUS 181/MUSI 2237)
Prerequisite: Demonstrated competence approved by the instructor. Students study and perform various forms of commercial music, such as jazz, pop, avant-garde, and fusion. Student arranging, composing, and conducting are encouraged. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035530)

MUSI 2143 Chorus (1)
(This is a common course number. Former course prefix/number MUS 150)
Prerequisite: Demonstrated competence approved by the instructor. A wide variety of music representing the literature of the great eras of music history is studied and performed. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 5009035730)

MUSI 2160 German Diction (1)
(This is a common course number. Former course prefix/number MUS 107)
The phonetic sounds of the German language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)

MUSI 2161 French Diction (1)
(This is a common course number. Former course prefix/number MUS 108)
The phonetic sounds of the French language are studied. Included is selected vocabulary. This course is primarily for voice majors. (2 Lab.)
(Coordinating Board Academic Approval Number 5009085330)
MUSI 2181 Piano Class III (1)
(This is a common course number. Former course prefix/number MUS 217)
Prerequisite: Music 1181 and 1182 or demonstrated competence approved by the instructor. This course is a continuation of functional keyboard skills, including harmonization, sight-reading, accompanying styles, improvisation, and technical exercises. It is designed for the music major preparing for the piano proficiency exam, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 2182 Piano Class IV (1)
(This is a common course number. Former course prefix/number MUS 218)
Prerequisite: Music 2181 or demonstrated competence of the instructor. This course is a continuation of functional keyboard skills in Music 2181 with greater emphasis on advanced harmonization and appropriate technical skills. It is designed as a preparation for the piano proficiency exam for the music major, but is also open to any interested student. It is recommended that music majors also study privately. (2 Lab.)
(Coordinating Board Academic Approval Number 5009075130)

MUSI 2192 Guitar Pedagogy (1)
(This is a common course number. Former course prefix/number MUS 205)
Guitar method books are surveyed. Emphasis is on the strengths and weaknesses of each method. Structuring lessons and optimizing each individual teacher-student relationship are also discussed. (2 Lec.)
(Coordinating Board Academic Approval Number 5009035130)

MUSI 2311 Music Theory III (3)
(This is a common course number. Former course prefix/number MUS 245)
Prerequisite: Music 1311 and 1312 or demonstrated competence approved by the instructor. This course is a continuation of the study of music theory. It includes the materials of modulation, larger forms, and thematic development, and more advanced analysis. It is recommended that students enrolled in Music 2116 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045230)

MUSI 2312 Music Theory IV (3)
(This is a common course number. Former course prefix/number MUS 246)
Prerequisite: Music 2311 or demonstrated competence approved by the instructor. This course is a continuation of the topics developed in Music 2311. The preceding materials are expanded to include melody, harmony, tonality, and the formal processes of 20th century music. It is recommended that students enrolled in Music 2118 enroll in this course. (3 Lec.)
(Coordinating Board Academic Approval Number 5009045230)

MUSI 9176 Recital (1)
(Former course prefix/number MUS 199)
This is an on-campus concert/seminar series designed to provide a laboratory and listening experience as an extension of classroom music studies. Concerts, seminars and workshops are presented by guest artists and lecturers, faculty members and students. This is a one-hour credit course and may be repeated for credit. (2 Lab.)

MUSP 1242 Small Commercial Music Ensemble (2)
(This is a WECM course number. Former course prefix/number MUSI 1378.)
Participation in a small commercial music ensemble concentrating on commercial music performance styles. (3 Lec.)

MUSP 1391 Special Topics in Music - General Performance (3)
(This is a WECM course number. Former course prefix/number MUSI 2371.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)

RTVB 1380 Cooperative Education - Radio and Television Broadcasting (3)
(This is a WECM course number. Former course prefix/number MUSI 2371.)
Career related activities encountered in the students area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)

RTVB 1392 Special Topics in Radio and Television Broadcasting Technology/Technician (3)
(This is a WECM course number. Former course prefix/number MUSI 2371.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated if topics and learning outcomes vary. (3 Lec.)
RTVB 2343 Commercial Recording Techniques (3)
(This is a WECM course number. Former course prefix/number MUSI 1270.)
Development of advanced skills in multi-track recording production for the commercial sound recording industry.
(2 Lec., 2 Lab.)

NURSING

RNSG 1105 Nursing Skills I (1)
(This is a WECM course number. Former course prefix/number NURS 1971.)
Prerequisites: Minimum grade of C in RNSG 1523, RNSG 1460, Biology 1472 or Biology 2402, and Psychology 2314. Concurrent enrollment in Biology 2420 and Speech Communication 1311. Concurrent enrollment in corequisite courses RNSG 2504 and RNSG 1461. Study of the concepts and principles essential for demonstrating competence in the performance of nursing procedures. Topics include knowledge, judgement skills, and professional values within a legal/ethical framework. Focus is on assessment, parenteral medication administration; IV therapy; documentation; surgical asepsis; basic skills competency validation. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). Laboratory fee. (2 Lab.)

RNSG 1160 Clinical-Nursing (R.N. Training) (1)
(This is a WECM course number. Former course prefix/number NURS 1570.)
Prerequisites: Current Texas LVN license, admission to the Associate Degree Nursing program, and C grade or better in Biology 1470 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5 or better. Additional prerequisites include Biology 1472 or 2402, 2420, Psychology 2314 and Speech Communication 1311 with a minimum grade of C. Licensed Vocational Nurses will take this course in place of RNSG 1523, RNSG 1460, RNSG 2504, RNSG 1105, RNSG 1461. Concurrent enrollment in corequisite courses RNSG 1327 and RNSG 1170. A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Utilizes Nursing process in the care of individuals with problems in areas of fluid/electrolytes, inflammation/immune response, and reproductive/sexual health. Focus is on health promotion, expanded assessment, multi-disciplinary teamwork, communication, and the role of the nurse within a legal/ethical framework. Content includes applicable competencies in basic workplace skills. (3 Ext.)

RNSG 1170 ADN Bridge Nursing Skills (1)
(This is a local need course number. Former course prefix/number NURS 1570.)
Prerequisite: Current Texas LVN license, admission to the Associate Degree Nursing program, and C grade or better in Biology 1470 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5 or better. Additional prerequisites include Biology 1472 or 2402, 2420, Psychology 2314 and Speech Communication 1311 with a minimum grade of C. Licensed Vocational Nurses will take this course in place of RNSG 1523, RNSG 1460, RNSG 2504, RNSG 1105, RNSG 1461. Concurrent enrollment in corequisite courses RNSG 1327, RNSG 1160. Knowledge and principles applicable in the performance of nursing skills and procedures. Focus is on assessment of adults, clients in childbearing/child rearing; critical thinking; documentation; communication skills; nursing process with an ethical legal framework; transition from LVN to RN role. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). Laboratory fee. (2 Lab.)
RNSG 1301 Pharmacology (3)
(This is a WECM course number. Former course prefix/number NURS 1370.)
Prerequisites: Minimum grade of C in Biology 1470 or 2401 and concurrent enrollment in Biology 1472 or 2402. Registered Nurses or Licensed Vocational Nurses may enroll for refresher purposes. Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. (3 Lec.)

RNSG 1311 Nursing Pathophysiology (3)
(This is a WECM course number. Former course prefix/number NURS 1371.)
Prerequisites: Biology 1470 or 2401 and concurrent enrollment in Biology 1472 or 2402. Registered nurses or Licensed Vocational Nurses may enroll for refresher purposes. Basic principles of pathophysiology emphasizing nursing applications. Topics include principles of homeostasis related to body systems. (3 Lec.)

RNSG 1327 Transition from Vocational to Professional Nursing (3)
(This is a WECM course number. Former course prefix/number NURS 1570.)
Prerequisites: Current Texas LVN license, admission to the Associate Degree Nursing program, and C grade or better in Biology 1470 or Biology 2401, Psychology 2301, English 1301, and Mathematics 1314 equaling a grade point average of 2.5 or better. Additional prerequisites include Biology 1472 or 2402, 2420, Psychology 2314 and Speech Communication 1311 with a minimum grade of C. Licensed Vocational Nurses will take this course in place of RNSG 1523, RNSG 1460, RNSG 2504, RNSG 1105, RNSG 1461. Concurrent enrollment in corequisite courses RNSG 1170, RNSG 1160. Topics include health promotion, expanded assessment, analysis of data, nursing process, pharmacology, multidisciplinary teamwork, communication, and applicable competencies in knowledge, judgement, skills, and professional values within a legal/ethical framework throughout the lifespan. Specific areas of emphasis include the role of the nurse in the management of clients with problems of fluid and electrolytes, inflammation/immune response, nutrition and clients during childbearing and child rearing ages. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (3 Lec.)

RNSG 1460 Clinical-Nursing (R.N. Training) (4)
(This is a WECM course number. Former course prefix/number NURS 1870.)
Prerequisites: Admission to the program and C grade or better in Biology 1470 or Biology 2401, Psychology 2301, English 1301 and Mathematics 1314 equaling a grade point average of 2.5. Concurrent enrollment in Biology 1472 or Biology 2402 and Psychology 2314. Concurrent enrollment in corequisite course RNSG 1523. A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Nursing process is utilized in the care of adults in acute and transitional care settings. Focus is on health promotion/disease prevention, basic pharmacological concepts, caring, ethical/legal aspects, and decision-making. Emphasis is on beginning assessment, psychomotor; and communication skills. Content includes applicable competencies in basic workplace skills. (12 Ext.)

RNSG 1461 Clinical-Nursing (R.N. Training) (4)
(This is a WECM course number. Former course prefix/number NURS 1971.)
Prerequisites: Minimum grade of C in RNSG 1523, RNSG 1460, Biology 1472 or Biology 2402, and Psychology 2314. Concurrent enrollment in Biology 2420 and Speech Communication 1311. Concurrent enrollment in corequisite courses RNSG 2504 and RNSG 1105. A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Utilizes the nursing process to deliver care to individuals and families in varied structured health care settings. Focus is on health promotion/health maintenance, nutrition, pharmacologic management, communication, ethical/legal aspects, and course-related psychomotor skills. Emphasis is on physical and psychosocial assessment of newborns, children, and adults in the collaborative management of individuals and families during childbearing and child rearing ages and in caring for individuals undergoing selected surgical interventions. Content includes applicable competencies in basic workplace skills. (12 Ext.)
RNSG 1523 Introduction to Professional Nursing (5)
(This is a WECM course number. Former course prefix/number NURS 1870.)
Prerequisites: Admission to the program and C grade or better in Biology 1470 or Biology 2401, Psychology 2301, English 1301 and Mathematics 1314 equaling a grade point average of 2.5. Concurrent enrollment in Biology 1472 or Biology 2402 and Psychology 2314. Concurrent enrollment in corequisite course RNSG 1460. Introduction to the profession of nursing including the roles of the registered nurse with emphasis on the application of a systematic, problem-solving process to provide care to diverse clients across the life span; and including applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on caring, competent nursing care of adults in acute and transitional care settings. Emphasis in the lab component is on medical and surgical asepsis; assessment; documentation; safety; selected skills for basic care needs; oral/topical medications. Content includes applicable competencies in basic workplace skills. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). Laboratory fee. (4 Lec., 2 Lab.)

RNSG 2161 Clinical-Nursing (R.N. Training) (1)
(This is a WECM course number. Former course prefix/number NURS 2375.)
Prerequisites: Minimum grade of C in RNSG 2504, RNSG 1105, RNSG 1461, Biology 2420, and Speech Communication 1311. Concurrent enrollment in RNSG 2414 and RNSG 2460 and in a Humanities course. Concurrent enrollment in corequisite course RNSG 2213 and RNSG 1160. LVN Option: Minimum grade of C in RNSG 1327, RNSG 1170, and RNSG 1160. Principles and concepts of mental health, psychopathology, and treatment modalities relating to the nursing care of clients and their families. Emphasis is on assessment, communication techniques, promotion of mental health, caring, ethical/legal aspects, collaborative roles of nurse in a variety of settings. Content includes applicable competencies in basic workplace skills. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (2 Lec.)

RNSG 2213 Mental Health Nursing (2)
(This is a WECM course number. Former course prefix/number NURS 2375.)
Prerequisites: Minimum grade of C in RNSG 2504, RNSG 1105, RNSG 1461, Biology 2420, and Speech Communication 1311. Concurrent enrollment in RNSG 2414 and RNSG 2460 and in a Humanities course. LVN Option: Minimum grade of C in RNSG 1327, RNSG 1170, and RNSG 1160. Concurrent enrollment in corequisite course RNSG 22161. Principles and concepts of mental health, psychopathology, and treatment modalities relating to the nursing care of clients and their families. Emphasis is on assessment, communication techniques, promotion of mental health, caring, ethical/legal aspects, collaborative roles of nurse in a variety of settings. Content includes applicable competencies in basic workplace skills. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (2 Lec.)

RNSG 2221 Management of Client Care (2)
(This is a WECM course number. Former course prefix/number NURS 2270.)
Prerequisites: Minimum grade of C in RNSG 2414, RNSG 2460, RNSG 2213, RNSG 2161. Concurrent enrollment in corequisite courses RNSG 2535 and RNSG 2562. Exploration of leadership and management principles applicable to the role of the nurse as a provider of care, coordinator of care, and member of a profession. Includes application of knowledge, judgement, skills, and professional values within a legal/ethical framework. Emphasis is on economics, communication skills, trends and issues in health care delivery systems, legal and ethical parameters of professional nursing according to the Nurse Practice Act. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (2 Lec.)
RNSG 2414 Care of the Client with Complex Health Care Needs (4)
(This is a WECM course number. Former course prefix NURS 2870.)
Prerequisites: Minimum grade of C in RNSG 2504, RNSG 1105, RNSG 1461, Biology 2420, and Speech Communication 1311. Concurrent enrollment in RNSG 2213, RNSG 2161 and in a Humanities course. LVN Option: Minimum of C in RNSG 1327, RNSG 1170, RNSG 1160. Concurrent enrollment in corequisite course RNSG 2460. Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients/families across the life span with complex health care needs in health maintenance and health restoration. Opportunities to collaborate with members of the multidisciplinary health care team. Topics include the role of the nurse as client advocate and coordinator of care and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on performance of an adult assessment, pharmacotherapeutic interventions, and the collaborative role of the nurse in the delivery of safe, caring nursing care. Content includes applicable competencies in basic workplace skills. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (4 Lec.)

RNSG 2460 Clinical-Nursing (R.N. Training) (4)
(This is a WECM course number. Former course prefix/number NURS 2870.)
Prerequisites: Minimum grade of C in RNSG 2504, RNSG 1105, RNSG 1461 Biology 2420, and Speech Communication 1311. Concurrent enrollment in RNSG 2213 and RNSG 2161 and in a Humanities course. LVN Option: Minimum of C in RNSG 1327, RNSG 1170, RNSG 1160. Concurrent enrollment in corequisite course RNSG 2414. A method of instruction providing detailed education, training, and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Utilizes systematic problem-solving process and critical thinking skills to provide nursing care to adults with complex care needs in diverse health care settings. Focus is on health promotion, work organization, time management, communication techniques, ethical/legal aspects, and critical thinking skills. Emphasis is on performance of an adult assessment, pharmacotherapeutic interventions, and the collaborative role of the nurse in the delivery of nursing care. Content includes applicable competencies in course related and basic workplace skills. (12 Ext.)

RNSG 2504 Care of the Client with Common Health Care Needs (5)
(This is a WECM course number. Former course prefix/number NURS 2971.)
Prerequisites: Minimum grade of C in RNSG 1523, RNSG 1460, Biology 1472 or Biology 2402, and Psychology 2314. Concurrent enrollment in Biology 2420 and Speech Communication 1311. Concurrent enrollment in corequisite courses RNSG 1105 and RNSG 1461. Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients/families across the life span with common health care needs. Opportunities for collaboration with members of the multidisciplinary health care team. Content includes applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Focus is on caring, competent nursing care of individuals and families during childbearing and child rearing ages. Emphasis is on aspects of health promotion, health maintenance, nutrition, pharmacologic management. Content includes applicable competencies in basic workplace skills. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (5 Lec.)

RNSG 2535 Integrated Client Care Management (5)
(This is a WECM course number. Former course prefix/number NURS 2972.)
Prerequisites: Minimum grade of C in RNSG 2414, RNSG 2460 and RNSG 2213, RNSG 2161. Concurrent enrollment in corequisite RNSG 2562 and RNSG 2221. Application of client assessment skills, critical thinking, and independent nursing interventions to care for diverse clients/families throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical decision-making, nursing leadership skills, and client management. Topics include the significance of professional development, trends in nursing and health care, and applicable knowledge judgement, skills, and professional values within a legal/ethical framework. Focus is on caring, competent nursing care of individuals who are experiencing acute episodes of illness and/or multisystem failure. Emphasis on pathophysiology, treatment modalities, and nursing interventions. Content includes applicable competencies in basic workplace skills. Licensing/Certification Agency: Board of Nurse Examiners for the State of Texas (BNE). (5 Lec.)

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SRGT 1167 Practicum (or Field Experience)-
Surgical/Operating Room Technician (1)
(This is a WECM course number. Former course prefix/number SGTC 1671.)
Prerequisites: Current R. N. licensure by the Board of Nurse Examiners for the State of Texas, or graduate nurse pending NCLEX-RN examination. Current CPR certification. Acceptance into the Perioperative Nurse Internship program. Concurrent enrollment in Perioperative Nurse Internship I (SRGT 1471). Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student’s general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (10 Ext.)

SRGT 2571 Perioperative Nurse Internship II (5)
(This is a local need course number. Former course prefix/number SGTC 1672.)
Prerequisites: A minimum C grade or better in Perioperative Nurse Internship I (SRGT 1471) and Practicum (SRGT 1167). Concurrent enrollment in Perioperative Nurse Internship I (SRGT 1471). Expansion of the principles and skills learned in Perioperative Nurse Internship I. Included are: specific patient preparations and care for given surgical procedures; would healing; complications of anesthesia and surgery; and pre and post-operative visits. Selected surgical procedures will incorporate all human body systems. The circulating role is emphasized. (5 Lec.)
NUTRITION

NUTR 1322 Principles of Nutrition (3)
(Former course prefix/number NTR 101. Common Course Number is HECO 1322)
This is an introduction to human nutrition. Topics will include classes, sources, and function of nutrients, digestion and absorption, and metabolism with applications to normal and therapeutic nutritional needs.
(3 Lec.)
(Coordinating Board Academic Approval Number 1905025133)

OFFICE TECHNOLOGY

ITSW 1407 Introduction to Database (4)
(This Is a WECM course number. Former course prefix/number CISC 2481.)
Introduction to database theory and the practical applications of a database. Topics include terminology, database design, table structures, report forms, queries and macros. Laboratory fee. (3 Lec., 4 Lab.)

POFI 1301 Computer Applications I (3)
(This Is a WECM course number. Former course prefix/number OFCT 1377.)
Overview of computer applications including current terminology and technology. Introduction to computer hardware, software applications, procedures, and Internet usage. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFI 1341 Computer Applications II (3)
(This Is a WECM course number. Former course prefix/number OFCT 2373.)
Continued study of current computer terminology and technology. Advanced skill development in computer hardware, software applications, and procedures. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFI 1345 Integrated Software Applications II (3)
(This Is a WECM course number. Former course prefix/number OFCT 1380.)
Continued study of computer applications from business productivity software suites. Instruction in embedding data and linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFI 1349 Spreadsheets (3)
(This Is a WECM course number. Former course prefix/number OFCT 1380.)
Skill development in the use of a spreadsheet software package. Topics include worksheet creation and manipulation functions, templates, macro programming database functions, data-table features, and graphics. This course may be repeated for credit. Laboratory fee. (2 Lec., 3 Lab.)

POFI 2301 Word Processing (3)
(This Is a WECM course number. Former course prefix/number OFCT 1379.)
Suggested Prerequisite: Keyboarding proficiency. Instructions on the various aspects of a word processing software package. Emphasis on the use of text editing features to produce business documents. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFI 2331 Desktop Publishing for the Office (3)
(This Is a WECM course number. Former course prefix/number OFCT 2372.)
In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, and multiple page displays. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFI 2337 Introduction to Keyboarding (1)
(This Is a WECM course number. Former course prefix/number OFCT 1171.)
Skill development in keyboarding with emphasis on alphabet, number, and symbol keys by touch. Laboratory fee. (2 Lab.)

POFO 1127 Introduction to Keyboarding (1)
(This Is a WECM course number. Former course prefix/number OFCT 1170.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation which are relevant to the professional development of the student. This course may be repeated for credit. Laboratory fee. (2 Lab.)

POFT 1193 Special Topics in General Office/Clerical and Typing Services (1)
(This Is a WECM course number. Former course prefix/number OFCT 1171.)
Instruction in proofreading and editing skills necessary to assure accuracy in written documents and business correspondence. Laboratory fee. (1 Lec., 2 Lab.)

POFT 1207 Proofreading and Editing (2)
(This Is a WECM course number.)
Instruction in proofreading and editing skills necessary to assure accuracy in written documents and business correspondence. Laboratory fee. (1 Lec., 2 Lab.)
POFT 1293 Special Topics in General Office/Clerical and Typing Services (2)
(This is a WECM course number. Former course prefix/number OFCT 1170.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation which are relevant to the professional development of the student. This course may be repeated for credit. Laboratory fee. (1 Lec., 2 Lab.)

POFT 1302 Business Communications I (3)
(This is a WECM course number. Former course prefix/number OFCT 2370.)
Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1309 Administrative Office Procedures I (3)
(This is a WECM course number. Former course prefix/number OFCT 1373.)
Suggested Prerequisite: Basic Keyboarding Skills. Study of current office procedures including telephone skills, time management, travel and meeting arrangements, mail processing, and other duties and responsibilities in an office environment. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1313 Professional Development for Office Personnel (3)
(This is a WECM course number.)
Preparation for the work force including business ethics, teamwork, professional attire, promotability, and interpersonal skills development. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1319 Records and Information Management I (3)
(This is a WECM course number. Former course prefix/number OFCT 1371.)
Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1321 Business Math (3)
(This is a WECM course number.)
Instruction in the fundamentals of business mathematics including analytical and problem-solving skills for critical thinking in business applications. Laboratory fee. (3 Lec.)

POFT 1325 Business Math and Machine Applications (3)
(This is a WECM course number. Former course prefix/number OFCT 1372.)
Skill development in the use of electronic calculators and business mathematical functions. Emphasis on business problem-solving skills using spreadsheet software. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1329 Keyboarding and Document Formatting (3)
(This is a WECM course number. Former course prefix/number OFCT 1375.)
Skill development in the operation of the keyboard by touch applying proper keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1349 Administrative Office Procedures II (3)
(This is a WECM course number.)
Advanced office application with special emphasis on decision making, goal setting, management theories, and critical thinking. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1380 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM course number. Former course prefix/number OFCT 7471.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

POFT 1381 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM course number. Former course prefix/number OFCT 7471.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

POFT 1382 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM course number. Former course prefix/number OFCT 7371.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience directly related to a technical discipline. Specific learning objectives guide the student through the paid work experience. This course may be repeated for credit. (1 Lec. 15 Ext.)
POFT 1383 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM course number. Former course prefix/number OFCT 7471.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience directly related to a technical discipline. Specific learning objectives guide the student through the paid work experience. This course may be repeated for credit. (1 Lec., 20 Ext.)

POFT 1392 Special Topics in Administrative Assistant/Secretarial Science, General (3)
(This is a WECM course number.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation which are relevant to the professional development of the student. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1393 Special Topics in General Office/Clerical and Typing Services (3)
(This is a WECM course number. Former course prefix/number OFCT 1270.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFT 1493 Special Topics in General Office/Clerical and Typing Services (4)
(This is a WECM course number. Former course prefix/number OFCT 1370.)
Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated for credit. Laboratory fee. (2 Lec., 4 Lab.)

POFT 2203 Speed and Accuracy Building (2)
(This is a WECM course number. Former course prefix/number OFCT 1173.)
Review, correct, improve, and/or perfect touch keyboarding techniques for the purpose of increasing speed and improving accuracy. Laboratory fee. (1 Lec., 2 Lab.)

POFT 2301 Document Formatting and Skillbuilding (3)
(This is a WECM course number. Former course prefix/number OFCT 1376.)
Suggested Prerequisite: Keyboarding and Document Formatting. A continuation of keyboarding skills in document formatting, speed, and accuracy. Emphasis is on proofreading, editing, following instruction, and keying documents from various copy. This course may be repeated for credit. Laboratory fee. (2 Lec., 2 Lab.)

POFT 2312 Business Communications II (3)
(This is a WECM course number. Former course prefix/number OFCT 2370.)
Skill development in practical applications which emphasize the improvement of writing skills necessary for effective business communications. Laboratory fee. (2 Lec., 2 Lab.)

POFT 2331 Administrative Systems (3)
(This is a WECM course number.)
Experience in project management and office procedures utilizing integration of previously learned skills. Laboratory fee. (2 Lec., 2 Lab.)

POFT 2380 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM course number. Former course prefix/number OFCT 7471.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

POFT 2381 Cooperative Education-Administrative Assistant/Secretarial Science, General (3)
(This is a WECM course number. Former course prefix/number OFCT 7471.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and employer, the student combines classroom learning with work experience directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)
POFT 2382 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM course number. Former course prefix/number OFCT 7372.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience directly related to a technical discipline. Specific learning objectives guide the student through the paid work experience. This course may be repeated for credit. (1 Lec., 15 Ext.)

POFT 2383 Cooperative Education-General Office/Clerical and Typing Services (3)
(This is a WECM course number. Former course prefix/number OFCT 7472.)
Career related activities encountered in the student's area of specialization offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience directly related to a technical discipline. Specific learning objectives guide the student through the paid work experience. This course may be repeated for credit. (1 Lec., 20 Ext.)

POFT 2388 Internship-General Office/Clerical and Typing Services (3)
(This is a WECM course number. Former course prefix/number OFCT 7372.)
An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

PARALEGAL

LGLA 1266 Practicum Paralegal/Legal Assistant (2)
(This is a WECM course number. Former course prefix/number LEGL 7471.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. Practical general training and experiences in the workplace are offered. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study (paralegal/legal assistant). The guided external experiences may be paid or unpaid. This course may be repeated (LGLA 2266 or LGLA 2380) if topics and learning outcomes vary. The student must attend a one-hour per week seminar in addition to the workplace hours required. (1 Lec., 14 Ext.)

LGLA 1301 Legal Research and Writing (3)
(This is a WECM course number. Former course prefix/number LEGL 1374.)
Corequisites: LGLA 1313 or LGLA 1311. This course provides a working knowledge of the fundamentals of effective legal research and writing. Topics include law library techniques and operations, computer assisted legal research, writing briefs and legal memoranda, proper citation form for legal resources, ethical obligations of the paralegal in legal research, and legal research terminology. (3 Lec.)

LGLA 1311 Introduction to Law (3)
(This is a WECM course number. Former course prefix/number LEGL 1373.)
Corequisites: LGLA 1313 or LGLA 1311. This course provides an overview of the law and the legal system. Topics include elementary legal concepts of various areas of the law, procedures, terminology, ethical obligations of the paralegal, current issues in law, and the function, jurisdiction, practices, and principles of trial and appellate courts at state and federal levels. (3 Lec.)

LGLA 1313 Introduction to Paralegal Studies (3)
(This is a WECM course number. Former course prefix/number LEGL 1370.)
Corequisites: LGLA 1311 or LGLA 1311. This course provides an overview of the paralegal profession including ethical obligations, regulation, professional trends and issues, and the paralegal's role in assisting the delivery of legal services. Professional organizations, job search strategies, legal vocabulary, legal analysis, writing skills, and critical thinking are introduced. (3 Lec.)
LGLA 1343 Bankruptcy (3)
(This is a WECM course number. Former course prefix/number LEGL 2381.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of bankruptcy law and procedure. Topics include individual and business liquidation and reorganization, debtors' and creditors' rights, adversarial matters and litigation in bankruptcy court, legal terminology relating to bankruptcy law, ethical considerations for paralegals working in this area, and emerging computer applications in bankruptcy practice. (3 Lec.)

LGLA 1345 Civil Litigation (3)
(This is a WECM course number. Former course prefix/number LEGL 2372.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts, rules, and procedures of civil litigation with emphasis on the paralegal's role. Topics include pretrial, trial, and post-trial phases of civil litigation, the role of alternative dispute resolution processes in civil litigation proceedings, practical techniques required to cope with protracted or complex litigation, ethical considerations, drafting problems a paralegal may encounter in this area, and computer applications utilized in civil litigation activities. (3 Lec.)

LGLA 1351 Contracts (3)
(This is a WECM course number. Former course prefix/number LEGL 2376.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of contract law with emphasis on the paralegal's role. Topics include formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code, ethical considerations of the paralegal working in this area, emerging computer applications, contract law terminology, and special problems encountered when drafting various instruments and documents related to the law of contracts. (3 Lec.)

LGLA 1353 Wills, Trusts, and Probate Administration (3)
(This is a WECM course number. Former course prefix/number LEGL 2374.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of the law of will, trusts, and probate administration with emphasis on the paralegal's role. Topics include common law and statutory components of wills, trusts, and other instruments relating to estate planning, estate tax considerations, alternatives to traditional estate planning mechanisms, common law and statutory requirements regarding testate and intestate distribution of property, ethical obligations and professional responsibilities of the paralegal working in this area, drafting guidelines and concerns, probate court structure and procedures, emerging computer applications, and legal terminology related to wills, trusts, and probate administration. (3 Lec.)

LGLA 1355 Family Law (3)
(This is a WECM course number. Former course prefix/number LEGL 1372.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, separation, divorce, annulment, marital property, the parent-child relationship, child custody and support, adoption, guardianship, domestic relations court procedures, public records research, and the paralegal's role in alternative dispute resolution/mediation processes. Ethical obligations, family law terminology, and emerging computer applications in domestic relations practice are also presented. (3 Lec.)

LGLA 1380 Cooperative Education-Paralegal/Legal Assistant (3)
(This is a WECM course number. Former course prefix/number LEGL 7371.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. Career related activities encountered in the student's area of specialization (paralegal/legal assistant) are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline (paralegal/legal assistant), specific learning objectives guide the student through the paid work experience. This course may be repeated (LGLA 2380) if topics and learning outcomes vary. The student must attend a one-hour per week seminar in addition to the workplace hours required. (1 Lec., 15 Ext.)
This course presents fundamental common law and statutory concepts of tort law with emphasis on the paralegal's role. Topics include intentional torts, negligence, product liability, strict liability, special tort actions, immunities and commonly employed defenses, techniques of investigating claims, a paralegal's ethical obligations in this field, tort law terminology, and computer applications in tort law. (3 Lec.)

LGLA 2267 Practicum-Paralegal/Legal Assistant (2)
(ThIs Is a WECM course number. Former course prefix/number LEGL 7472.)
Prerequisites: LGLA 1313, LGLA 1311, LGLA 1266 or LGLA 1380, ENGL 1301. Practical general training and experiences in the workplace are offered. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study (paralegal/legal assistant). The guided external experiences may be paid or unpaid. This course may be repeated (LGLA 2267) if topics and learning outcomes vary. This course is available for the student who has successfully completed LGLA 1266 or LGLA 1380 and who selected learning objectives different from those achieved in a previous practicum or cooperative work experience course. Seminar topics different from those covered in LGLA 1266 or LGLA 1380 are presented. The student must attend a one-hour per week seminar in addition to the workplace hours required. (1 Lec., 14 Ext.)

LGLA 2266 Practicum-Paralegal/Legal Assistant (2)
(ThIs Is a WECM course number. Former course prefix/number LEGL 7472.)
Prerequisites: LGLA 1313, LGLA 1311, LGLA 1266 or LGLA 1380, ENGL 1301. Practical general training and experiences in the workplace are offered. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study (paralegal/legal assistant). The guided external experiences may be paid or unpaid. This course is available for the student who has successfully completed LGLA 1266 or LGLA 1380 and who selected learning objectives different from those achieved in a previous practicum or cooperative work experience course. Seminar topics different from those covered in LGLA 1266 or LGLA 1380 are presented. The student must attend a one-hour per week seminar in addition to the workplace hours required. (1 Lec., 14 Ext.)

LGLA 2309 Real Property (3)
(ThIs Is a WECM course number. Former course prefix/number LEGL 1371.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents fundamental common law and statutory concepts of real property law with emphasis on the paralegal's role. Topics include the nature of real property, rights and duties of ownership, land use and limitations, voluntary and involuntary conveyances (deeds, contracts, liens, mortgages, deeds of trust, leases, etc.), property descriptions, the recording and searching for real estate documents, landlord and tenant issues, problems involved in drafting real estate documents, ethical considerations for a paralegal working in the real estate area, real property terminology, and emerging computer resources and applications in real estate practice. (3 Lec.)

LGLA 2307 Law Office Management (3)
(ThIs Is a WECM course number. Former course prefix/number LEGL 2377.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents the fundamentals of law office management and organization including basic principles and structure of management, administrative and substantive systems in large and small law offices and law practice technology. Topics include accounting systems, budgets, cash flow planning, marketing, time and billing systems, current developments in computer applications, benefits, effective utilization of attorney and staff resources, ethical obligations of the paralegal handling law office management responsibilities, and career opportunities for paralegals in this field. (3 Lec.)

LGLA 2311 Business Organizations (3)
(ThIs Is a WECM course number. Former course prefix/number LEGL 1371.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course presents basic common law and statutory concepts of business organizations with emphasis on the paralegal's role. Topics include the law of agency, sole proprietorships, forms of partnerships, forms of corporations, and emerging business entities such as limited liability companies and partnerships. Additional topics include ethical considerations, legal terminology related to business organizations, and computer applications being utilized in this area. Practical organizational and writing skills are emphasized through assigned drafting and formation projects. (3 Lec.)
LGLA 2313 Criminal Law and Procedure (3)
(This is a WECM course number. Former course prefix/number LEGL 2379.)
Prerequisites: LGLA 1313, LGLA 1311, ENGL 1301. This course introduces the criminal justice system including procedures from arrest to final disposition, principles of federal and state law and the preparation of pleadings and motions. The paralegal's role in assisting the attorney practicing criminal law is emphasized. Topics include review of the criminal court system, stages in a criminal prosecution, constitutional rights and limitations of the accused, investigation procedures, the juvenile justice system, dealing with clients, drafting specialized documents, ethical obligations of the paralegal working in this area, criminal law terminology, and the impact of computer applications on criminal courts and criminal law attorneys. (3 Lec.)

LGLA 2331 Advanced Legal Research and Writing (3)
(This is a WECM course number. Former course prefix/number LEGL 2378.)
Prerequisites: LGLA 1313, LGLA 1311, LGLA 1301, at least 7 other LGLA courses, and ENGL 1301. This capstone course must be taken during the final semester you are enrolled in the program. This course builds upon skills acquired in prior legal research and writing courses including computerized research techniques and preparation of complex legal documents such as briefs, legal office memoranda, and citation forms. This course requires the student to synthesize the specialized information and resources learned in all previously completed paralegal courses and apply this knowledge to a capstone activity. (3 Lec.)

LGLA 2335 Advanced Civil Litigation (3)
(This is a WECM course number. Former course prefix/number LEGL 2380.)
Prerequisites: LGLA 1313, LGLA 1311, LGLA 1345, ENGL 1301. This course provides opportunities to implement advanced civil litigation techniques and builds upon skills acquired in prior civil litigation courses with emphasis on the paralegal's role. Common law and statutory civil litigation concepts, ethical obligations of the paralegal assisting in civil litigation work, alternative dispute resolution processes, are reviewed. (3 Lec.)

LGLA 2380 Cooperative Education-Paralegal/Legal Assistant (3)
(This is a WECM course number. Former course prefix/number LEGL 7372.)
Prerequisites: LGLA 1313, LGLA 1311, LGLA 1380 or LGLA 1266, ENGL 1301. Career related activities encountered in the student's area of specialization (paralegal/legal assistant) are offered through a cooperative agreement between the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline (paralegal/legal assistant), specific learning objectives guide the student through the paid work experience. This course is available for the student who has successfully completed LGLA 1360 or LGLA 1266 and who selects learning objectives different from those achieved in a previous cooperative work experience or practicum course. Seminar topics different from those covered in LGLA 1360 or LGLA 1266 are presented. The student must attend a one-hour per week seminar in addition to the workplace hours required. (1 Lec., 15 Ext.)

PARAMEDIC

EMSP 1338 Introduction to Advanced Practice (3)
(This is a WECM course number. Former course prefix/number EMPT 1570.)
Prerequisites: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by Texas Department of Health or National Registry of EMTs as Emergency Medical Technicians, (2) Current CPR certification, (3) Demonstrated competency in math, reading and anatomy and physiology. An exploration of the foundations necessary for mastery of the advanced topics of clinical practice out of the hospital. Laboratory fee. (2 Lec., 2 Lab.)

EMSP 1355 Trauma Management (3)
(This is a WECM course number. Former course prefix/number EMPT 1570.)
Prerequisites: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by Texas Department of Health or National Registry of EMTs as Emergency Medical Technicians, (2) Current CPR certification, (3) Demonstrated competency in math, reading and anatomy and physiology. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with traumatic injuries. Laboratory fee. (2 Lec., 2 Lab.)
EMSP 2143 Assessment Based Management (1)
(This is a WECM course number. Former course prefix/number EMPT 2470.)
Prerequisites: Successful completion of EMSP 2544, 2188, 2534 and 2430. The capstone course of the EMSP program. Designed to provide for teaching and evaluating comprehensive, assessment-based patient care management. Laboratory fee. (2 Lab.)

EMSP 2187 Internship-Emergency Medical Technology/Technician (1)
(This is a WECM course number. Former course prefix/number EMPT 1170.)
Prerequisite: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by Texas Department of Health or National Registry of EMTs as Emergency Medical Technicians, (2) Current CPR certification, (3) Demonstrated competency in math, reading and anatomy and physiology. (Taken concomitantly with Paramedic 1338, 1355, and 2544.) An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (3 Ext.)

EMSP 2188 Internship-Emergency Medical Technology/Technician (1)
(This is a WECM course number. Former course prefix/number EMPT 1171.)
Prerequisites: Successful completion of Paramedic 1338, 1355, and 2187. This course is taken concomitantly with Paramedic 2534 and 2430. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (3 Ext.)

EMSP 2289 Internship - Emergency Medical Technology/Technician (1)
(This is a WECM course number. Former course prefix/number EMPT 1170.)
Prerequisites: Successful completion of Paramedic 2534, 2430 and 2188. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (8 Ext.)

EMSP 2338 EMS Operations (3)
(This is a WECM course number. Former course prefix/number EMPT 2470.)
Prerequisites: Successful completion of Paramedic 1338, 1355, and 2187. A detailed study of the knowledge and skills necessary to reach competence to safely manage the scene of an emergency. Laboratory fee. (2 Lec., 2 Lab.)

EMSP 2430 Special Populations (4)
(This is a WECM course number. Former course prefix/number EMPT 1470.)
Prerequisite: Successful completion of Paramedic 1338, 1355, and 2187. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients in nontraditional populations. Laboratory fee. (3 Lec., 2 Lab.)

EMSP 2534 Medical Emergencies (5)
(This is a WECM course number. Former course prefix/number EMPT 2470.)
Prerequisites: Successful completion of Paramedic 1338, 1355, and 2187. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with medical emergencies. Laboratory fee. (4 Lec., 2 Lab.)

EMSP 2544 Cardiology (5)
(This is a WECM course number. Former course prefix/number EMPT 1571.)
Prerequisites: (1) Completion of Texas Department of Health approved Emergency Medical Technician course, or certification by Texas Department of Health or National Registry of EMTs as Emergency Medical Technicians, (2) Current CPR certification, (3) Demonstrated competency in math, reading and anatomy and physiology. A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. (5 Lec.)
EMSP 2586 Internship—Emergency Medical Technology/Technician (5)
(This is a WECM course number. Former course prefix/number EMPT 2571.)
Prerequisites: Successful completion of Paramedic 2338 and 2289 and certification by the Texas Department of Health as an Emergency Medical Technician. An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (15 Ext.)

PATIENT CARE TECHNICIAN

MDCA 1205 Medical Law And Ethics (2)
(This is a WECM course number.)
Instruction in principles, procedures, and regulations involving legal and ethical relationships among physicians, patients, and medical assistants. Includes current ethical issues as they relate to the practice of medicine and fiduciary responsibilities. This course may be repeated for credit. (2 Lec.)

MDCA 1352 Medical Assistant Laboratory Procedures (3)
(This is a WECM course number.)
Emphasis on common laboratory procedures performed in the physician’s office or clinic setting. Includes blood collection, specimen handling, basic urinalysis, identification of normal ranges, and electrocardiography. This course may be repeated for credit. (2 Lec., 3 Lab.)

NURA 1260 Clinical—Nursing Assistant/Aide (3)
(This is a WECM course number.)
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical sight. Specific detailed learning objectives and redeveloped for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (2 Ext.)

NURA 1301 Nurse Aide For Health Care Organizations I (3)
(This is a WECM course number.)
Preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide basic care to residents of long-term care facilities. Topics include resident’s rights, communication, safety, observation, reporting and assisting residents in maintaining basic comfort and safety. Emphasis on effective interaction with members of the health care team. This course may be repeated for credit. (2 Lec., 3 Lab.)

NURA 1307 Nurse Aide For Health Care Organizations II (3)
(This is a WECM course number.)
A basic study of the structures and functions of the human body. This course may be repeated for credit. (2 Lec., 3 Lab.)

PHILOSOPHY

PHIL 1301 Introduction To Philosophy (3)
(This is a common course number. Former course prefix/number PHI 101)
The fundamental problems in philosophy are surveyed. Methods to deal with the problems are discussed. Ancient and modern views are examined as possible solutions. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015135)

PHIL 1313 Critical Thinking (3)
(Former course prefix/number PHI 103/PHIL 1370)
This course is designed to improve students' critical thinking ability. Students will both analyze and construct arguments. Elementary deductive forms, common fallacies, and inductive reasoning are considered. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015735)

PHIL 2303 Logic (3)
(This is a common course number. Former course prefix/number PHI 105)
The principles of logical thinking are analyzed. The methods and tools of logic are applied to real-life situations. Fallacies, definitions, analogies, syllogisms, Venn diagrams, and other topics are discussed. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015235)

PHIL 2306 Ethics (3)
(This is a common course number. Former course prefix/number PHI 203)
This course surveys the history, theories and issues of moral reasoning and behavior. Practical applications will also be made. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015335)
PHIL 2307 Introduction To Social And Political Philosophy (3)
(This is a common course number. Former course prefix/number PHI 202)
The relationships of philosophical ideas to the community are presented. Emphasis is on concepts of natural rights, justice, education, freedom, and responsibility. (3 Lee.)
(Coordinating Board Academic Approval Number 3801015535)

PHIL 2316 History Of Ancient Philosophy (3)
(This is a common course number. Former course prefix/number PHI 207)
The history of philosophy from pre-Socratic times to the Renaissance is examined. Connections are made between the pre-Socratics, Plato, and Aristotle; Stoicism, Epicureanism, and Scholasticism are considered. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015535)

PHIL 2317 History Of Modern Philosophy (3)
(This is a common course number. Former course prefix/number PHI 208)
The history of philosophy from the Renaissance through the 19th. century is examined. Emphasis is on continental rationalism, British empiricism, Kantian metaphysics and epistemology, and the Hegelian system as it relates to 20th. century philosophies. The historical relationship between these schools of thought is explored. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015535)

PHOTOGRAPHY

NOTE: These courses have a Dallas County Community College prefix of "PHOT;" however, some can be identified by a Common Course Number for transfer evaluation purposes. Both are listed in the parenthetical notes in the course descriptions.

PHOT 1316 Introduction To Photography And Photojournalism (3)
(Former course prefix/number PHO 110. Common Course Number Is COMM 1316)
Photography and photojournalism are introduced. Topics include the general mechanics of camera lenses and shutters and the general characteristics of photographic films, papers, and chemicals. Darkroom procedures are presented, including enlarging, processing, contact printing, and exposing films and papers. Artificial lighting is introduced. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0904015526)

PHOT 1317 Advanced Photography And Photojournalism (3)
(Former course prefix/number PHO 111. Common Course Number Is COMM 1317)
Prerequisite: Photography 1316 or demonstrated competence approved by the instructor. Techniques learned in Photography 1316 are refined. Emphasis is on photographic communication. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0904015526)

PHOT 1370 Special Photographic Topics and Problems (Non-Lab Related) (3)
(Former course prefix/number PHO 115)
This course of study addresses special photographic topics or problems which do not require lab instruction or use of lab facilities. Topics may include special interest areas such as: history of photography, photographic criticism, history of film making, looking at photographic collections, and color slide photography. The course will be narrow in scope to provide for in-depth study of the particular topics and may employ field trips and visiting instructors with specialized expertise. This course may be repeated for credit. (3 Lec.)
(Coordinating Board Academic Approval Number 5006055230)

PHOT 2324 Introduction to Multimedia (3)
(Former course prefix/number PHO 212. Common Course Number Is COMM 2324)
Prerequisites: Photography 1316 or Art 1370, Photography 2325. This course will provide students with an exploration of the latest computer hardware and software applications used to produce multimedia presentations. Students will experience the areas of digital sound reproduction, the creation of computer animation, converting video into digital images, and digital editing techniques. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015326)

PHOT 2325 Introduction to Digital Imaging (3)
(Former course prefix/number PHO 214. Common Course Number Is COMM 2325)
Prerequisite: Photography 1316 or Art 1370 is recommended for this course. This is a broad-based, introductory course which explores the creation and manipulation of images on the computer. The course content will include an introduction to the computer system, an overview of desktop publishing and graphic programs, use of the digital camera, scanning-in photographs, and exploring techniques of photo-manipulation. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015326)
PHOT 2326 Advanced Digital Imaging (3)
(Former course prefix/number PHO 125. Common Course
Number is COMM 2326)
Prerequisites: Photography 2325 is required. In
addition, Photography 1316 or Art 1370 is
recommended. This course will explore in greater depth
the applications covered in the Introduction to Digital
Imaging (Photography 2325) class. Students will work to
master the technical complexities of digital photography
and seek to clarify a personal direction through extended
projects. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 0907015326)

PHOT 2356 Commercial Photography I (3)
(Former course prefix/number PHO 122. Common Course
Number Is ARTS 2356)
Prerequisites: Photography 1316 and 1317 or
demonstrated competence approved by the instructor.
Commercial or contract photography is studied. Field,
studio, and darkroom experiences for various kinds of
photography are discussed. Social, portrait, studio,
fashion, publicity, landscape, and product photography,
as well as portfolio development, are included. The use
of natural and artificial lighting is covered. Laboratory
fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055130)

PHOT 2357 Commercial Photography II (3)
(Former course prefix/number PHO 123. Common Course
Number Is ARTS 2357)
Prerequisites: Photography 1316 and 1317 or
demonstrated competence approved by the instructor.
This course is a continuation of Photography 2356.
Publicity, architectural, interior, and advertising
photography are included. The latest equipment,
papers, films, and techniques are explored. Exchanges
may be made with sample clients, employers, studios,
and agencies. Laboratory fee. (2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055230)

PHOT 2370 Photography For Publications (3)
(Former course prefix/number PHO 207)
Prerequisites: Photography 1316 and 1317 or
demonstrated competence approved by the instructor.
This course is designed for the student who is interested
in journalistic editing, publications photography, and
graphic arts procedures. It encourages skills in all three
areas and prepares the student for a broad job market
that includes photojournalism, printing, editing,
composing, and general copy preparation. Students
who enroll in this course should have a background in
journalism, photography, and graphic arts and be of
sophomore standing. Laboratory fee. (2 Lec., 4 Lab.)

PHOT 2371 Advanced Multimedia (3)
(Former course prefix/number PHO 213)
Prerequisites: Photography 1316 or Art 1370,
Photography 2325, and Photography 2324. This course
offers students a continued refinement of multimedia
techniques to create interactive animation presentations.
Students will gain competency of powerful software
applications in order to design, create, and building
programming sequences. Laboratory fee. (2 Lec., 4
Lab.)
(Coordinating Board Academic Approval Number 0907015326)

PHOT 2375 Special Photographic Topics And
Problems (3)
(Former course prefix/number PHO 215)
Prerequisites: Photography 1316 and 1317 or
demonstrated competence approved by the instructor.
This course of study addresses special photographic
topics or problems that may result from technological
advances and particular student and/or instructor
interests and/or expertise. Topics may include special
interest areas such as architectural, landscape, wedding,
environmental portraiture and audio-visual slide-with-
sound productions. The course will be narrow in scope
to provide for in-depth study of the particular topic and
may employ visiting instructors with specialized
expertise. This course may be repeated for credit.
(2 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 5006055230)

PHYSICAL EDUCATION

PHED 1100 Beginning Lifetime Sports Activities (1)
(This Is a common course number. Former course prefix/number
PEH 100)
Beginning level skills in various lifetime sports are
presented as well as rules, etiquette, safety, strategy,
offensive and defensive elements, conditioning activities,
and physical assessment where appropriate. Physical
Education 1100 may be repeated for credit when
students select different activities. Laboratory fee.
(3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1101 Beginning Casting And Angling (1)
(This Is a common course number. Former course prefix/number
PEH 103)
This course will include the fundamentals of bait casting,
spinning and spin casting. This course covers basic
knowledge and understanding of angling techniques and
general knowledge and understanding of angling techniques and
concepts, and will include several tackle crafts.
Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)
PHED 1102 Beginning Soccer (1)
(This is a common course number. Former course prefix/number PEH 104)
Course content emphasizes the basic playing skills of both indoor and outdoor soccer at the beginner level, as well as rules, strategies, safety, offensive and defensive patterns of play, and competitive activities. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1103 Shooting and Firearm Safety (1)
(This is a common course number. Former course prefix/number PEH 105)
Course content includes fundamentals of shooting, gun safety and principles of reloading. This course includes personal safety associated with hunting and sport shooting. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1104 Beginning Softball (1)
(This is a common course number. Former course prefix/number PEH 112)
Course content includes the basic playing skills of softball at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. These common elements will be applied to fast pitch, slow pitch, and coed softball. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1105 Beginning Racquetball (1)
(This is a common course number. Former course prefix/number PEH 113)
Basic racquetball skills, rules and strategies are taught and class tournaments are conducted. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1106 Beginning Badminton (1)
(This is a common course number. Former course prefix/number PEH 114)
Course content emphasizes the basic playing skills of badminton at the beginner level, as well as rules, strategies, safety, offensive and defensive elements, and competitive activities. Each of the above elements will be applied to the singles, doubles, and mixed-double games. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1107 Intramural Athletics (1)
(This is a common course number. Former course prefix/number PEH 116)
Intramural competition in a variety of activities is offered for men and women. Individual and team competition are offered. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1108 Beginning Archery (1)
(This is a common course number. Former course prefix/number PEH 117)
The beginning level skills of target and field shooting and bow hunting are emphasized. History, rules of competition, preparation and care of equipment and safety are included. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1109 Beginning Golf (1)
(This is a common course number. Former course prefix/number PEH 118)
Course content emphasizes the basic skills involved in club selection, golf course analysis, shot selection and execution of the golf swing. Rules, scoring, handicapping, and etiquette are included. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1110 Beginning Tennis (1)
(This is a common course number. Former course prefix/number PEH 119)
This course emphasizes the acquisition of beginning level skills in the execution of forehand strokes, backhand strokes, the serve, and the volley. Rules, strategies of the singles and doubles games, etiquette, safety, and competitive activities are included. Equipment is furnished. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1111 Beginning Bowling (1)
(This is a common course number. Former course prefix/number PEH 120)
Basic bowling skills at the beginner level as well as rules, strategies, safety, scoring and competitive activities are emphasized. All classes are conducted at an off-campus bowling lane. Lane fee. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1112 Folk Dance (1)
(This is a common course number. Former course prefix/number PEH 121)
Participation is provided in a variety of folk dances from other lands. The study of cultural backgrounds and costumes is included. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)
PHED 1113 Beginning Gymnastics (1)
(This is a common course number. Former course prefix/number PEH 122)
Beginning level skills in both men's and women's all-around gymnastic events are emphasized. Men's events include horizontal bar, pommel horse, rings, vaulting, floor exercise, and parallel bars. Women's events include floor exercise, vaulting, balance beam, and uneven parallel bars. Basic tumbling skills are also included. All appropriate events will be incorporated into a beginner's level routine. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1114 Beginning Swimming (1)
(This is a common course number. Former course prefix/number PEH 123)
This course is designed to teach a non-swimmer or a shallow water swimmer to become a safe and efficient deep water swimmer. After the development of sufficient skills to perform a modified crawl stroke, the elementary back stroke, survival floating, jumping into deep water, leveling off and changing directions, swimmers will be able to swim in deep water. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1115 Social Dance (1)
(This is a common course number. Former course prefix/number PEH 124)
This course is for students who have limited experience in dance. Ballroom and social dancing are offered. Included are fundamental steps and rhythms of the fox-trot, waltz, tango, and recent dances. "Country" dancing includes the two-step, cotton-eyed Joe, square dance, and other dances. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1116 Conditioning Exercise (1)
(This is a common course number. Former course prefix/number PEH 125)
This course focuses on understanding exercise and its effect on the body. Cardiovascular endurance, muscular strength, endurance and flexibility are improved through a variety of conditioning activities. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1117 Beginning Basketball And Volleyball (1)
(This is a common course number. Former course prefix/number PEH 127)
Basic basketball and volleyball skills are taught. Rules, game strategies and competitive activities are included. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1118 Modern Dance (1)
(This is a common course number. Former course prefix/number PEH 129)
This beginning course is designed to emphasize basic dance technique, body alignment and placement, floor work, locomotor patterns, and creative movement. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1119 Beginning Weight Training (1)
(This is a common course number. Former course prefix/number PEH 131)
Instruction in weight training and conditioning techniques are stressed. Emphasis is placed on muscular strength and endurance. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1120 Beginning Self-Defense (1)
(This is a common course number. Former course prefix/number PEH 132)
Various forms of self-defense are introduced. The history and philosophy of the martial arts are explored. The student should progress from no previous experience in self-defense to an adequate skill level covering basic self-defense situations. Both mental and physical aspects of the arts are stressed. Uniform required. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1121 Beginning Jogging (1)
(This is a common course number. Former course prefix/number PEH 133)
Development and improvement of physical fitness through jogging is emphasized. Fitness concepts and jogging skills will be introduced. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1122 Outdoor Education (1)
(This is a common course number. Former course prefix/number PEH 134)
Knowledge and skills in outdoor education and camping are presented. Planned and incidental experiences take place, including a week-end camp-out. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1123 Beginning Walking for Fitness (1)
(This is a common course number. Former course prefix/number PEH 135)
This course is designed for the student who desires cardiovascular fitness by means of a low impact method. Physical fitness is achieved by vigorous walking. The heart rate is elevated to the appropriate target zone for peak conditioning. An extensive warm-up and cool down increases joint and muscle flexibility. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)
PHED 1124 Beginning Aerobics (1)
(This is a common course number. Former course prefix/number PEH 137)
This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, jumping, etc. Individual fitness levels are accommodated by the intensity of the workout. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1125 Aquatic Fitness (1)
(This is a common course number. Former course prefix/number PEH 143)
This course is designed to promote fitness through the use of water-related activities compatible with a pool environment. Emphasis is placed on water resistant exercises, lap swimming utilizing various kicks and strokes, relays, and a variety of aquatic games. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1126 Beginning Cycling (1)
(This is a common course number. Former course prefix/number PEH 145)
Development of cycling skills and improvement of physical fitness through cycling are emphasized. Fitness concepts, riding technique, safety, routine maintenance and repair of the cycle are fundamental topics of this course. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1127 Triathlon Fitness (1)
(This is a common course number. Former course prefix/number PEH 146)
This course includes an individualized program of walking, running, cycling, swimming, and weight training. From these activities, the student and instructor will design a fitness program to improve total body fitness, strength, endurance and self-image. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1128 Canoeing/Kayaking (1)
(This is a common course number. Former course prefix/number PEH 149)
This course is designed to teach the students knowledge and appreciation of basic white water canoeing/kayaking skills so they can actively engage in these activities throughout their lives. A weekend river trip is included in this course. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1129 Backpacking/Rock Climbing (1)
(This is a common course number. Former course prefix/number PEH 150)
This course is designed to teach the students basic skills, knowledge and appreciation of backpacking and rock climbing to the extent that they can actively engage in these activities throughout their lives. A weekend backpacking trip is included in the course. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1130 Intermediate Lifetime Sports Activities (1)
(This is a common course number. Former course prefix/number PEH 200)
Intermediate and intermediate/advanced skills in a variety of lifetime sports are presented. Students participate in a selected sport. Physical Education 1130 may be repeated for credit when students select different activities. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1131 Intermediate Soccer (1)
(This is a common course number. Former course prefix/number PEH 204)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of strategies, safety, offensive and defensive patterns of play and competitive activities are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1132 Intermediate Softball (1)
(This is a common course number. Former course prefix/number PEH 212)
Emphasis is placed on game strategy, base coaching, preparing a lineup, conducting drills, and performance on hitting, catching, and throwing. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1133 Intermediate Racquetball (1)
(This is a common course number. Former course prefix/number PEH 213)
This activity course is designed for students seeking to advance their racquetball skill level. The course content covers advanced shot execution, strategy, and the doubles game. Emphasis is placed on improved skill and strategy. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)

PHED 1134 Intermediate Physical Fitness (1)
(This is a common course number. Former course prefix/number PEH 215)
Basic skills and techniques of fitness-related activities are developed beyond the beginner level. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085128)
PHED 1135 Intermediate Archery (1)
(This is a common course number. Former course prefix/number PEH 217)
Course content includes refinement for basic archery skills and competitive target shooting and field archery. Equipment is furnished. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1136 Intermediate Golf (1)
(This is a common course number. Former course prefix/number PEH 218)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the golf swing, swing theory and methods, strategy, and actual golf course playing are emphasized. Equipment is furnished. Green fees. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1137 Intermediate Tennis (1)
(This is a common course number. Former course prefix/number PEH 219)
Emphasis is placed on refinement of basic skills and specialty shots. Competitive activities in singles, doubles and mixed doubles will be included. Equipment is furnished. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1139 Intermediate Gymnastics (1)
(This is a common course number. Former course prefix/number PEH 222)
Basic tumbling and the all-around events for men and women will be emphasized at the intermediate performance level. Course emphasis is placed on the development, preparation and presentation of gymnastic routines. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1140 Intermediate Swimming (1)
(This is a common course number. Former course prefix/number PEH 223)
The correct performance of the crawl, elementary back stroke, side and breast strokes will be emphasized. Some speed and endurance swimming will be required. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1141 Intermediate Weight Training (1)
(This is a common course number. Former course prefix/number PEH 231)
Skills and instruction in weight training techniques are developed beyond the beginner level. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1142 Intermediate Self-Defense (1)
(This is a common course number. Former course prefix/number PEH 223)
Students will be introduced to intermediate forms of defense and combinations of self defense methods. Emphasis is on practical application of self defense movements. Uniform required. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1143 Intermediate Jogging (1)
(This is a common course number. Former course prefix/number PEH 233)
Improvement of physical fitness through jogging is developed beyond the beginner stage. A higher level of fitness is expected. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1144 Intermediate Walking for Fitness (1)
(This is a common course number. Former course prefix/number PEH 235)
Students participate in a low impact exercise walking program beyond the beginning level. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1145 Intermediate Aerobics (1)
(This is a common course number. Former course prefix/number PEH 237)
This course emphasizes the development of cardiovascular endurance by utilizing choreographed routines which may combine basic dance patterns with walking, jogging, jumping, etc. Individual fitness levels are developed beyond the beginner level. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1146 Intermediate Basketball (1)
(This is a common course number. Former course prefix/number PEH 239)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of shooting, passing, dribbling, team play, strategies, and competitive play covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)

PHED 1147 Intermediate Volleyball (1)
(This is a common course number. Former course prefix/number PEH 240)
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of the forearm pass, setting, spiking, serving, team play, strategies, and competitive play are covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Equipment is furnished. Laboratory fee. (3 Lab.) (Coordinating Board Academic Approval Number 3601085128)
PHED 1148 Intermediate Baseball (1)  
(This is a common course number. Former course prefix/number PEH 241)  
Basic skills and techniques are refined beyond the beginner level. Analysis and practice of hitting, fielding, pitching, team play, and competitive play are emphasized. Baseball history and interpretation of the rules are also covered. Course emphasis is placed on the development and preparation for participation on an intercollegiate team. Laboratory fee. (3 Lab.)  
(Coordinating Board Academic Approval Number 3601085128)

PHED 1149 Intermediate Cycling (1)  
(This is a common course number. Former course prefix/number PEH 245)  
Improvement of physical fitness through cycling is developed beyond the beginner stage. A higher level of fitness is expected. Laboratory fee. (3 Lab.)  
(Coordinating Board Academic Approval Number 3601085128)

PHED 1150 Intermediate Bowling (1)  
(This is a common course number. Former course prefix/number PEH 220)  
This course is designed for students seeking improvement in the lifetime sport of bowling. The course covers a review of history, etiquette, care and selection of equipment, rules and scoring. Additional information will be provided on handicapping, league play, variation of grips, spot bowling and alley textures. Laboratory fee. (3 Lab.)  
(Coordinating Board Academic Approval Number 3601085128)

PHED 1164 Beginning Physical Fitness (1)  
(This is a common course number. Former course prefix/number PEH 115)  
Students are introduced to wellness related concepts and activities for the purpose of gaining knowledge and skills necessary to evaluate personal fitness level and to develop a personal lifelong fitness program. Activities include, but are not limited to: aerobics, circuit training, muscular development, flexibility, agility exercises, weight training and body composition. Pre- and Post-fitness assessments included. Laboratory fee. (3 Lab.)  
(Coordinating Board Academic Approval Number 3601085128)

PHED 1270 Divemaster (2)  
(Former course prefix/number PEH 142)  
Prerequisite: Physical Education 2271 or advanced certification from any of the national certifying organizations. This course is designed for the advanced diver who seeks additional training as an instructional assistant responsible for the organization, teaching and safety of scuba divers. Students who successfully complete this course will receive divemaster certification. Laboratory fee. (1 Lec., 2 Lab.)  
(Coordinating Board Academic Approval Number 3601085328)

PHED 1301 Introduction To Physical Education (3)  
(This is a common course number. Former course prefix/number PEH 144)  
This course is for students majoring in physical education and is designed for professional orientation in physical education, health, and recreation. The history, philosophy, and modern trends of physical education are surveyed. Topics include teacher qualifications, vocational opportunities, expected competencies, and skill testing. This course does not satisfy the physical education activity course requirement. (3 Lec.)  
(Coordinating Board Academic Approval Number 3105015228)

PHED 1304 Health For Today (3)  
(This is a common course number. Former course prefix/number PEH 101)  
Emphasis is placed on relating course content to lifestyle to foster a better understanding of the major health issues of today. Current issues include, but are not limited to: emotional health, chemical use and abuse, human sexuality, major diseases, physical fitness, nutrition, aging, death and dying. This course does not satisfy the physical education activity course requirement. (3 Lec.)  
(Coordinating Board Academic Approval Number 5103015128)

PHED 1306 Advanced First Aid And Emergency Care (3)  
(This is a common course number. Former course prefix/number PEH 257)  
This course covers the theory and practice in advanced first aid and emergency care. Various aspects of safety education also are included. The course content has been selected from nationally recognized organizations in safety education and first aid. This course does not satisfy the physical education activity course requirement. (3 Lec.)  
(Coordinating Board Academic Approval Number 5103015328)

PHED 1308 Sports Officiating I (3)  
(This is a common course number. Former course prefix/number PEH 147)  
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are football, basketball, and other sports as appropriate. Students are expected to officiate intramural games. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)  
(Coordinating Board Academic Approval Number 1202045128)
PHED 1309 Sports Officiating II (3)
(This is a common course number. Former course prefix/number PEH 148)
This course is for students who choose officiating for an avocation and who want to increase their knowledge and appreciation of sports. Sports covered in this course are softball, track and field, baseball, and other sports as appropriate. Students are expected to officiate intramural games. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1202045128)

PHED 1321 The Coaching Of Football And Basketball (3)
(This is a common course number. Former course prefix/number PEH 236)
The skills and techniques of coaching football and basketball are presented. Included are the history, theories, philosophies, rules, terminology, and finer points of the sports. Emphasis is on coaching techniques. This course does not satisfy the physical education activity course requirement. (2 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3105065128)

PHED 1336 Outdoor Recreation (3)
(This is a common course number. Former course prefix/number PEH 109)
Outdoor recreation and organized camping are studied. Both the development of these activities and present trends are covered. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3101015128)

PHED 1337 Community Recreation (3)
(This is a common course number. Former course prefix/number PEH 110)
This course is primarily for students majoring or minoring in health, physical education, or recreation. The principles, organization, and function of recreation in American society are covered. This course does not satisfy the physical education activity course requirement. (3 Lec.)
(Coordinating Board Academic Approval Number 3101015128)

PHED 2155 Advanced Life Saving (1)
(This is a common course number. Former course prefix/number PEH 226)
Prerequisite: Demonstrated competence approved by the instructor. Successful completion of this course qualifies students for the Red Cross Life Guarding Certificate. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHED 2225 Water Safety Instructor (2)
(This is a common course number. Former course prefix/number PEH 234)
Prerequisite: Current Advanced Life Saving Card. The principles and techniques for instructors in water safety and life saving classes are covered. Completion of the course qualifies the student to test for certification by the Red Cross as a water safety instructor. A uniform is required. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHED 2270 Scuba Diving (2)
(Former course prefix/number PEH 225)
Prerequisite: Demonstrated competence approved by the instructor. This course includes instruction in the proper use of equipment, safety, physiology and open water diving. Students completing course requirements receive certification through one of several major accredited associations. Equipment rental fee. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHED 2271 Advanced Open Water Scuba (2)
(Former course prefix/number PEH 228)
Prerequisite: Physical Education 2270 or appropriate certifying agency entry level certificate or 10 log book hours. Instruction will include the introductory knowledge and skill development in the open water environment for the student to participate in underwater investigation, deep diving, search and light salvage, and limited visibility/night diving. Safety, special equipment, dive planning and dive buddy procedures will be covered. Upon successful completion of the course, the student will receive advanced open water certification through a qualified certifying agency. Laboratory fee. (1 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 3601085328)

PHYSICAL SCIENCE

(See Physics)
PHYSICS

PHYS 1111 Astronomy Laboratory I (1)
(This is a common course number. Former course prefix/number AST 103)
Prerequisite: Credit or concurrent enrollment in Physics 1311. The student uses simple equipment to make elementary astronomical observations of the motions of celestial objects. Also covered are elementary navigational techniques, graphical techniques of calculating the position of a planet or comet, and construction of simple observing equipment. This laboratory includes night observations. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1112 Astronomy Laboratory II (1)
(This is a common course number. Former course prefix/number AST 104)
Prerequisite: Credit or concurrent enrollment in Physics 1312. The student makes and uses elementary astronomical observations. Topics include timekeeping, the various uses of spectra, and the motions of stars and galaxies. This laboratory includes night observations. Laboratory fee. (3 Lab.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1311 Descriptive Astronomy (3)
(This is a common course number. Former course prefix/number AST 101)
This course surveys the fundamentals of astronomy. Emphasis is on the solar system. Included is the study of the celestial sphere, the earth's motions, the moon, planets, asteroids, comets, meteors, and meteorites. (3 Lec.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1312 General Astronomy (3)
(This is a common course number. Former course prefix/number AST 102)
Stellar astronomy is emphasized. Topics include a study of the sun, the properties of stars, star clusters, nebulae, interstellar gas and dust, the Milky Way Galaxy, and external galaxies. (3 Lec.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1401 Introductory General Physics (4)
(This is a common course number. Former course prefix/number PHY 111)
Prerequisite: Two years of high school algebra, including trigonometry, or the equivalent. This course is for pre-dental, biology, premedical, pre-pharmacy, and pre-architecture majors and other students who need a two-semester technical course in physics. Mechanics and heat are studied. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015339)

PHYS 1402 Introductory General Physics (4)
(This is a common course number. Former course prefix/number PHY 112)
Prerequisite: Physics 1401. This course is a continuation of Physics 1401. Electricity, magnetism, light, and sound are studied. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015339)

PHYS 1405 Concepts In Physics (4)
(This is a common course number. Former course prefix/number PHY 117)
This course is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on classical mechanics and thermodynamics. Historical developments and their impact on daily life are included. The principle of energy conservation is stressed, and current problems of worldwide energy production are examined. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015139)

PHYS 1407 Concepts In Physics (4)
(This is a common course number. Former course prefix/number PHY 118)
This is for non-science majors. It introduces principles of physics and does not require a mathematical background. Emphasis is on modern developments in physics. Topics include acoustics, electricity and magnetism, light and the electromagnetic spectrum, atomic physics, and relativity. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015139)

PHYS 1411 Fundamentals Of Astronomy (4)
(This is a common course number. Former course prefix/number AST 111)
This course concerns fundamental aspects of the solar system and the historical development of astronomical ideas. Included are studies of the celestial sphere and motions of the earth, the moon, planets, and other minor bodies. The origin and evolution of the solar system are also covered. The laboratory includes outdoor viewing sessions and study of celestial motions, elementary navigation, constellation identification, and telescope construction. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4002015139)
PHYS 1412 General Introductory Astronomy (4)
(This is a common course number. Former course prefix/number AST 112)
This course concerns fundamental properties of stars, stellar systems, star clusters, nebulae, interstellar gas and dust, and galaxies. Included is the study of the sun, Milky Way Galaxy, stellar evolution, black holes, and current cosmological ideas. The laboratory includes outdoor viewing sessions and the study of timekeeping, use of spectra, and motions of stars and galaxies. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4002015139)

PHYS 1415 Physical Science (4)
(This is a common course number. Former course prefix/number PSC 118)
This course is primarily for non-science majors. It is a study of the basic principles and concepts of physics, chemistry, and nuclear science. The three basic sciences are related to the physical world at an introductory level. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4001015139)

PHYS 1417 Physical Science (4)
(This is a common course number. Former course prefix/number PSC 119)
This course is for non-science majors. It focuses on the interaction of the earth sciences and the physical world. Geology, astronomy, meteorology, and space science are emphasized. Selected principles and concepts are explored. This course is also offered as Geology 1401. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4001015139)

PHYS 2425 General Physics (4)
(This is a common course number. Former course prefix/number PHY 201)
Prerequisite: Credit or concurrent enrollment in Mathematics 2513. This course is designed primarily for physics, chemistry, mathematics, and engineering majors. The principles and applications of mechanics, wave motion, and sound are studied. Emphasis is on fundamental concepts, problem-solving, notation, and units. The laboratory includes a one-hour problem session. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015439)

PHYS 2426 General Physics (4)
(This is a common course number. Former course prefix/number PHY 202)
Prerequisites: Physics 2425 and credit or concurrent enrollment in Mathematics 2414. This course presents the principles and applications of heat, electricity, magnetism, and optics. Emphasis is on fundamental concepts, problem-solving, notation and units. The laboratory includes a one-hour problem session. Laboratory fee. (3 Lec., 3 Lab.)
(Coordinating Board Academic Approval Number 4008015439)

PLUMBING AND PIPEFITTING

CNBT 1201 Introduction to Construction (2)
(This is a WECM course number. Former course prefix/number PPFA 1270.)
An overview of the construction industry including: organizational structures and systems; safety regulations and agencies; construction documents; office and field organizations; and the various construction crafts and trades. Required. (1 Lec., 3 Lab.)

DFTG 1208 Basic Computer-Aided Drafting (2)
(This is a WECM course number.)
An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Required. (1 Lec., 3 Lab.)

DFTG 2234 Industrial Drafting Applications (2)
(This is a WECM course number. Former course prefix/number PPFA 2284 and DFTG 2285.)
An advanced synthesis of industrial drafting practices with emphasis on research, design, and project techniques. Required. (1 Lec., 3 Lab.)

ELPT 1311 Basic Electrical Theory (3)
(This is a WECM course number. Former course prefix/number PPFA 2282.)
An overview of the theory and practice of electrical circuits including calculations as applied to alternating and direct current. Required. (1 Lec., 3 Lab.)

HART 1273 Air Conditioning Control Principles (2)
(This is a local need course number. Former course prefix/number PPFA 2283.)
A basic study of electrical, pressure, and temperature controls including motor starting devices, operating relays, and troubleshooting safety controls and devices. Emphasis on use of wiring diagrams to analyze high and low voltage circuits. A review of Ohm's law as applied to A/C controls and circuits. Required. (1 Lec., 3 Lab.)
HART 2270 Commercial and Industrial Heating Systems (2)
(This is a local need course number. Former course prefix/number PPFA 2278.)
This course covers the theory and installation of commercial and industrial heating systems; included is the studied and installation of valves, pumps, and steam systems. Theories and practices concerning boilers and hydronic heating systems are also included. (1 Lec., 3 Lab.)

HART 2271 Commercial Air Conditioning (2)
(This is a local need course number. Former course prefix/number PPFA 2279.)
A study of components, applications, and installation of air conditioning systems with capacities of 25 tons or less. Required. (1 Lec., 3 Lab.)

HART 2273 Industrial Air Conditioning (2)
(This is a local need course number. Former course prefix/number PPFA 2280.)
A study of components, accessories, applications, and installation of air conditioning systems above 25 tons capacity. Required. (1 Lec., 3 Lab.)

HART 2274 Commercial and Industrial Pneumatic Controls (2)
(This is a local need course number. Former course prefix/number PPFA 2277.)
This course provides a comprehensive introduction in the use, installation, and operation of pneumatic controls in commercial and industrial construction. An introduction to start test and balance of mechanical equipment, and knowledge of the mechanical instrument family. (1 Lec., 3 Lab.)

PFPB 1270 Commercial Plumbing I (2)
(This is a local need course number. Former course prefix/number PPFA 2270.)
This course provides the skills necessary to align, test and start-up and trouble shoot various commercial and industrial systems. Included in this is pneumatic, turbines, pumps, boilers, hydraulic, and compressors. (1 Lec., 3 Lab.)

PFPB 1271 Commercial Plumbing II (2)
(This is a local need course number. Former course prefix/number PPFA 2271.)
This course continues the study commercial plumbing started in commercial plumbing I with proper methods used in the layout and installation of gas, Pneumatic, Water Heating Systems and miscellaneous piping commonly found in commercial buildings. (1 Lec., 3 Lab.)

PFPB 1372 Plumbing Codes I (3)
(This is a local need course number. Former course prefix/number PPFA 2274.)
An introductory study of state and local plumbing codes, and the application of the plumbing codes to job situations. Required. (2 Lec., 2 Lab.)

PFPB 1291 Special Topics in Plumber and Pipefitter (2)
(This is a WECM course number. Former course prefix/number PPFA 1274.)
Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Required. (1 Lec., 3 Lab.)

PFPB 1345 Commercial Construction and Fixture Setting (3)
(This is a WECM course number. Former course prefix/number PPFA 2273.)
An overview of the construction industry including: organizational structures and systems; safety regulations and agencies; construction documents; office and field organizations; and the various construction crafts and trades. Required. (2 Lec., 2 Lab.)

PFPB 2270 Industrial Plumbing (2)
(This is a local need course number. Former course prefix/number PPFA 2272.)
This course covers layout and installation of plumbing systems in industrial construction, which includes water treatment, power plants and manufacturing plants. (1 Lec., 3 Lab.)

PFPB 2272 Commercial and Industrial Gas Installation (2)
(This is a local need course number. Former course prefix/number PPFA 2275.)
This course provides training in the principles, code requirements, and practical knowledge necessary for the design and installation of a gas supply system in commercial and industrial applications. Required. (1 Lec., 3 Lab.)

PFPB 2273 Backflow Prevention (2)
(This is a local need course number. Former course prefix/number PPFA 2286.)
This course covers the cause and principles of contamination of potable water systems in the plumbing industry and training for the installation and testing of back flow prevention devices. Required. (1 Lec., 3 Lab.)

PFPB 2274 Medical Gas (2)
(This is a local need course number.)
This course studies the basic components, installation, and methods of medical gas piping systems. Health and safety requirements as well as inspection procedures are discussed. Required. (1 Lec., 3 Lab.)
PFPB 2275 Commercial and Industrial Control Systems (2)
(This is a local need course number. Former course prefix/number PPFA 2289.)
This course provides the skills necessary to instruct students in basic systems designs, equipment and control systems. Instruction on air handling units, air volume boxes, centrifugal chillers, absorption systems, cooling towers, water treatment, and chilled water systems is included. (1 Lec., 3 Lab.)

PFPB 2276 Commercial and Industrial Systems Start-Up (2)
(This is a local need course number.)
This course provides the skills necessary to align, test and start-up and trouble shoot various commercial and industrial systems. Included in this is pneumatic, turbines, pumps, boilers, hydraulic, and compressors. (1 Lec., 3 Lab.)

PFPB 2347 Plumbing and Pipefitting Equipment and Safety (3)
(This is a WECM course number. Former course prefix/number PPFA 1276.)
Instruction in the safe use of construction equipment used in the process of the plumbing and pipefitting trades. Required. (1 Lec., 3 Lab.)

PFPB 2371 Plumbing Codes II (3)
(This is a local need course number. Former course prefix/number PPFA 1276.)
In-depth coverage of the state and local codes and application of Codes for those employed in fields requiring knowledge of the Code. Emphasis is on plumbing protection and methods, special conditions, and advanced calculations. (2 Lec., 2 Lab.)

WLDG 1221 Introduction to Welding Fundamentals (2)
(This is a WECM course number. Former course prefix/number PPFA 1271.)
An introduction to the fundamentals of equipment used in oxy-fuel and arc welding, including welding and cutting safety, basic oxy-fuel welding and cutting, basic arc welding processes and basic metallurgy. Required. (1 Lec., 3 Lab.)

WLDG 1222 Introduction to Welding Fundamentals II (2)
(This is a WECM course number. Former course prefix/number PPFA 1273.)
An introduction to the fundamentals of equipment used in oxy-fuel and arc welding, including welding and cutting safety, basic oxy-fuel welding and cutting, basic arc welding processes and basic metallurgy. Required. (1 Lec., 3 Lab.)

WLDG 1253 Intermediate Layout and Fabrication (2)
(This is a WECM course number. Former course prefix/number PPFA 2288.)
A continuation of the introductory Layout and Fabrication course which covers design and production of shop layout and fabrication. Emphasis placed on symbols, blueprints, and written specifications. Required. (1 Lec., 3 Lab.)

WLDG 1254 Intermediate Layout and Fabrication (2)
(This is a WECM course number.)
A continuation of the introductory Layout and Fabrication course which covers design and production of shop layout and fabrication. Emphasis placed on symbols, blueprints, and written specifications. (1 Lec., 3 Lab.)

WLDG 2213 Welding Using Multiple Processes (2)
(This is a WECM course number. Former course prefix/number PPFA 2287.)
Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding (SMAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), gas tungsten arc welding (GTAW), or any other approved welding process. Required. (1 Lec., 3 Lab.)

PORTUGUESE

PORT 1311 Beginning Portuguese (3)
(This is a common course number.)
This course is an introduction to Portuguese speaking, comprehension, reading, writing and grammar. Cultural insights are also presented. Emphasis is on pronunciation, comprehension, and oral expression. It is strongly recommended that students who plan to study Portuguese for more than one semester enroll in Portuguese 1411 which includes an extra hour of lab per week (and an extra hour of credit for the course). Students who successfully complete Portuguese 1311 and wish to continue their studies of Portuguese may register for Portuguese 1412. Laboratory fee. (3 Lec., 1 Lab.)

PORT 1411 Beginning Portuguese (4)
(This is a common course number. Former course prefix/number POR 101)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. This course may be repeated for credit. Laboratory fee. (3 Lec., 2 Lab.)
PORT 1412 Beginning Portuguese (4)
(This is a common course number. Former course prefix/number POR 102)
Prerequisite: Portuguese 1411 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Portuguese 1411. Emphasis is on idiomatic language and complicated syntax. This course may be repeated for credit. Laboratory fee. (3 Lee., 2 Lab.)
(Coordinating Board Academic Approval Number 1609045131)

PORT 2311 Intermediate Portuguese (3)
(This is a common course number. Former course prefix/number POR 201)
Prerequisite: Portuguese 1412 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lee.)
(Coordinating Board Academic Approval Number 1609045231)

PORT 2312 Intermediate Portuguese (3)
(This is a common course number. Former course prefix/number POR 202)
Prerequisite: Portuguese 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Portuguese 2311. Reading and composition are continued. Grammar is reviewed and expanded. (3 Lee.)
(Coordinating Board Academic Approval Number 1609045231)

POSTAL SERVICE

All course descriptions in Postal Service will be revised prior to Fall 2000. Revised curriculum changes can be accessed and viewed on the Dallas County Community College District homepage at [http://www.dcccd.edu/admiss/cd.htm] or from an academic advisor beginning Summer 2000.

PSYCHOLOGY

PSYC 2301 Introduction To Psychology (3)
(This is a common course number. Former course prefix/number PSY 101)
Prerequisite: Developmental Reading 0093 or meet TASP/Alternative Assessment Standards in Reading. Introduction to Psychology surveys major topics in the study of behavior. Factors which determine and affect behavior are examined. Psychological principles are applied to the human experience. (3 Lee.)
(Coordinating Board Academic Approval Number 4201015140)

PSYC 2302 Applied Psychology (3)
(This is a common course number. Former course prefix/number PSY 202)
Prerequisite: TASP/Alternative Assessment passing Reading Standards recommended. Psychological facts and principles are applied to problems and activities of life and will be used to examine basic aspects of human relationships in society. This course will involve the direct application of psychological principles to human relation problems in such areas as business, health occupations, social service agencies, and interpersonal relationships. (3 Lee.)
(Coordinating Board Academic Approval Number 4201015240)

PSYC 2306 Human Sexuality (3)
(This is a common course number. Former course prefix/number PSY 103)
Prerequisite: TASP/Alternative Assessment passing Reading Standards recommended. Students may register for either Psychology 2306 or Sociology 2306 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality. (3 Lee.)
(Coordinating Board Academic Approval Number 4201015340)

PSYC 2314 Developmental Psychology (3)
(This is a common course number. Former course prefix/number PSY 201)
Prerequisite: TASP/Alternative Assessment passing Reading Standards and Psychology 2301 recommended. This course is a study of human growth, development, and behavior. Emphasis is on psychological changes during life. Processes of life from prenatal beginnings through adulthood and aging are included. (3 Lee.)
(Coordinating Board Academic Approval Number 4207015140)

PSYC 2316 Psychology Of Personality (3)
(This is a common course number. Former course prefix/number PSY 205)
Prerequisite: TASP/Alternative Assessment passing Reading Standards and Psychology 2301 recommended. This course is an introduction to the study of personality. Topics of personality and adjustment will be studied in the context of various personality theories. Emphasis will be on the application of those topics. (3 Lee.)
(Coordinating Board Academic Approval Number 4201015740)
PSYC 2319 Social Psychology (3)
(This is a common course number. Former course prefix/number PSY 207)
Prerequisite: TASP/Alternative Assessment passing Reading Standards and Psychology 2301 recommended. Students may register for either Psychology 2319 or Sociology 2326 but may receive credit for only one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. (3 Lec.)
(Coordinating Board Academic Approval Number 4216015140)

PSYC 2370 Selected Topics (3)
(Former course prefix/number PSY 211)
This course provides an in-depth study of current issues in psychology. Topics include: abnormal psychology, psychology of the offender, death and dying, and gender roles. Topics may vary from semester to semester and may be repeated for credit when topics vary. (3 Lec.)
(Coordinating Board Academic Approval Number 4201015540)

PSYC 2389 Psychology Practicum (3)
(This is a common course number.)
An instructional program designed to integrate on-campus study with practical field experience in Psychology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human behavior, and/or social institutions, and in the practice of community services. The course may be repeated for credit when field experiences vary. (1 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4501015142)

RADIO AND TELEVISION

(See Communications)

RADIOLOGIC SCIENCES

RADR 1166 Practicum (or Field Experience)- Medical Radiologic Technology/Technician (1)
(This is a WECM course number. Former course prefix/number RADS 1274.)
Prerequisites: HPRS 2231, HPRS 1204, HPRS 1291, RADR 2213, RADR 1411, RADR 1313, RADR 2301. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student's general and technical course of study. The guided external experience is unpaid. This course may be repeated if topics and learning outcomes vary. (8 Ext.)

RADR 1267 Practicum (or Field Experience)- Medical Radiologic Technology/Technician (2)
(This is a WECM course number. Former course prefix/number RADS 1275.)
Prerequisites: RADR 1166. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences are unpaid. This course may be repeated if topics and learning outcomes vary. (20 Ext.)

RADR 1313 Principles of Radiographic Imaging I (3)
(This is a WECM course number. Former course prefix/number RADS 1374.)
Prerequisites: RADR 1411. This course will analyze radiographic image quality and the effect of exposure variables upon radiographic quality. Laboratory fee. (2 Lec., 3 Lab.)

RADR 1411 Basic Radiographic Procedures (4)
(This is a WECM course number. Former course prefix/number RADS 1372 and RADS 1375.)
Prerequisites: RADR 2213, HPRS 1204, BIOL 1472 or BIOL 2402 or concurrent enrollment. This course includes an introduction to radiologic positioning terminology, the proper manipulation of equipment, positioning and alignment and evaluating images for proper demonstration of basic anatomy and related pathology. Laboratory fee. (3 Lec., 4 Lab.)

RADR 2133 Advanced Medical Imaging (1)
(This is a WECM course number not previously offered.)
Prerequisites: RADR 1313, RADR 2305 and ITSC 1401. An introduction to the use of computers in medical imaging and a survey of specialized imaging modalities. (1 Lec.)
RADR 2209 Radiographic Imaging Equipment (2)
(This is a WECM course number. Former course prefix/number
RADS 2272.)
Prerequisites: RADR 1313 and RADR 2305. A study of
the equipment and physics of x-ray production and basic
x-ray circuits and the relationship of equipment to the
imaging process. (2 lec.)

RADR 2213 Radiation Biology and Protection (2)
(This is a WECM course number. Former course prefix/number
RADS 1170.)
Prerequisites: BIOL 1470 or BIOL 2401 and admission
to the program. A study of the effects of radiation
exposure on biological systems, typical medical
exposure levels, methods for measuring and monitoring
radiation and methods for protecting personnel and
patients from excessive exposure. (2 Lec.)

RADR 2217 Radiographic Pathology (2)
(This is a WECM course number. Former course prefix/number
RADS 2270.)
Prerequisites: HPRS 2201, BIOL 1472 or BIOL 2402,
RADR 1411, RADR 2301, RADR 2331. An overview of
the disease process and common diseases and their
appearances on medical images. (2 Lec.)

RADR 2235 Radiologic Technology Seminar (2)
(This is a WECM course number. Former course prefix/number
RADS 2373 (partial) and RADS 2473 (partial).
Prerequisites: All previously required RADR courses in
sequence or concurrent enrollment. This is a capstone
course focusing on the synthesis of professional
knowledge, skills, and attitudes in preparation for
professional employment and life long learning.
Laboratory fee. (1 Lec., 3 Lab.)

RADR 2266 Practicum (or Field Experience)-
Medical Radiologic Technology/Technician (2)
(This is a WECM course number. Former course prefix/number
RADS 2372.)
Prerequisites: RADR 1166 and RADR 1267. Practical
general training and experiences in the workplace. The
college with the employer develops and documents an
individualized plan for the student. The plan relates the
workplace training and experiences to the student's
general and technical course of study. The guided
external experience is unpaid. This course may be
repeated if topics and learning outcomes vary. (20 Ext.)

RADR 2267 Practicum (or Field Experience)-
Medical Radiologic Technology/Technician (2)
(This is a WECM course number. Former course prefix/number
RADS 2472.)
Prerequisites: RADR 1166, RADR 1267, RAD 2266.
Practical general training and experience in the
workplace. The college with the employer develops and
documents an individualized plan for the student. The
plan relates the workplace training and experiences to
the student's general and technical course of study. The
guided external experience is unpaid. This course may
be repeated if topics and learning outcomes vary. (15 Ext.)

RADR 2301 Intermediate Radiographic
Procedures (3)
(This is a WECM course number. Former course prefix/number
RADS 1376.)
Prerequisites: RADR 1411, HPRS 1204. A continuation
of the study of the proper manipulation of radiographic
equipment, positioning and alignment of the anatomical
structure and equipment and evaluation of images for
proper demonstration of intermediate anatomy and
related pathology. Laboratory fee. (2 Lec., 4 Lab.)

RADR 2305 Principles of Radiographic Imaging II (3)
(This is a WECM course number. Former course prefix/number
RADS 1276 and RADS 2373.)
Prerequisites: RADR 1313. A continuation in the study
of radiographic imaging technique formulation, image
quality assurance, and the synthesis of all variables in
image production. Laboratory fee. (2 Lec., 2 Lab.)

RADR 2331 Advanced Radiographic Procedures (3)
(This is a WECM course number. Former course prefix/number
RADS 2374.)
Prerequisites: RADR 1411 and RADR 2301. An
advanced course including the proper manipulation of
equipment, positioning and alignment of anatomical
structure and equipment and evaluation of images for
proper demonstration of advanced anatomy and related
pathology. Laboratory fee. (2 Lec., 2 Lab.)

READING

READ 1370 College Reading And Study Skills (3)
(Former course prefix/number RD 101)
Comprehension techniques for reading college texts are
emphasized. Also included are vocabulary
development, critical reading, and rate flexibility. Study
skills addressed include listening, note taking,
underlining, concentrating, and memory. (3 Lec.)
( Cooperating Board Academic Approval Number 3801015735)
READ 1371 Speed Reading And Learning (3)
(Former course prefix/number RD 102)
Reading and learning skills are addressed. Speed reading techniques and comprehension are emphasized. Learning and memory skills are also covered. (3 Lec.)
(Coordinating Board Academic Approval Number 3801015735)

REAL ESTATE

RELE 1105 Uniform Standards Of Professional Appraisal (1)
(This is a WECM course number.)
Provides instruction on current provisions of the Uniform Standards of Professional Appraisal Practice (USPAP). (1 Lec.)

RELE 1191 Special Topics in Real Estate (1)
(This is a WECM course number. Former course prefix/number REAL 2170.)
Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec.)

RELE 1291 Special Topics in Real Estate (2)
(This is a WECM course number. Former course prefix/number REAL 2270.)
Topics address recently identified current event, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (2 Lec.)

RELE 1301 Principles of Real Estate (3)
(This is a WECM course number. Former course prefix/number REAL 1370.)
An overview of licensing as a real estate broker and salesperson, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. (3 Lec.)

RELE 1303 Real Estate Appraisal (3)
(This is a WECM course number. Former course prefix/number REAL 1374.)
A study of 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. (3 Lec.)

RELE 1307 Real Estate Investment (3)
(This is a WECM course number. Former course prefix/number REAL 2371.)
Financing, evaluation, and management of real estate investment. Emphasis on real estate investment characteristics, techniques of investment analysis, time-valued money, discounted investment criteria, leverage, and applications to property tax implications of owning real estate. (3 Lec.)

RELE 1309 Real Estate Law (3)
(This is a WECM course number. Former course prefix/number REAL 1375.)
Provides a study of legal concepts of real estate, land description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of title. (3 Lec.)

RELE 1311 Law Of Contracts (3)
(This is a WECM course number. Former course prefix/number REAL 1376.)
Includes the elements of a contract, offer and acceptance, the statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. (3 Lec.)

RELE 1315 Property Management (3)
(This is a WECM course number. Former course prefix/number REAL 2372.)
A study of the role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance reports, habitability laws, and the Fair Housing Act. (3 Lec.)

RELE 1319 Real Estate Finance (3)
(This is a WECM course number. Former course prefix/number REAL 1371.)
An overview of the U.S. monetary system, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative instruments, laws affecting mortgage lending, and the State Housing Agency. (3 Lec.)

RELE 1321 Real Estate Marketing (3)
(This is a WECM course number. Former course prefix/number REAL 1372.)
A study of real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiating and closing financing; and the deceptive trade practice act, consumer protection act, and commercial code. (3 Lec.)
RELE 1323 Real Estate Computer Application (3)
(This is a WECM course number.)
A study of the availability of technology, especially software, and its ability to help a real estate agent become more productive. Includes data base mapping interest and software application. (3 Lec.)

RELE 1325 Real Estate Mathematics (3)
(This is a WECM course number. Former course prefix/number REAL 1378.)
Mathematical logic and basic arithmetic skills including percentages, interest, time-valued money, depreciation, amortization, proration, and estimation of closing statement. (3 Lec.)

RELE 1327 Real Estate Commercial Appraisal (3)
(This is a WECM course number. Former course prefix/number REAL 1373.)
Principles and techniques used in the valuation of commercial property. Topics include purposes and functions of an appraisal, social and economic forces affecting value, appraisal case studies, cost, and income approaches to value. (3 Lec.)

RELE 1391 Special Topics In Real Estate (3)
(This is a WECM course number. Former course prefix/number REAL 2374.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)

RELE 2301 Law Of Agency (3)
(This is a WECM course number. Former course prefix/number REAL 1379.)
A study of law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying procedures, and the disclosure of an agency. (3 Lec.)

RELE 2305 Real Estate Inspections (3)
(This is a WECM course number. Former course prefix/number REAL 2373.)
A study of the different types of building systems and materials used in the design and construction of real property. Covers residential construction and commercial building systems and materials. Includes different structural building systems with emphasis on wood-related products, concrete and concrete masonry, brick, stone and steel units. The Texas Real Estate Commission Promulgated Property Condition Addendum will be addressed along with inspector and client agreements, tools and procedures, and electro-mechanical systems. (3 Lec.)

RELE 2331 Real Estate Brokerage (3)
(This is a WECM course number. Former course prefix/number REAL 2370.)
A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. (3 Lec.)

RELE 2380 Cooperative Education - Real Estate (3)
(This is a WECM course number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

RELE 2381 Cooperative Education - Real Estate (3)
(This is a WECM course number.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning objectives vary. (1 Lec., 20 Ext.)

RELE 2388 Internship - Real Estate (3)
(This is a WECM course number. Former course prefix/number REAL 7471.)
An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to a specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (9 Ext.)
RELE 2389 Internship-Real Estate (3)
(This is a WECM course number. Former course prefix/number REAL 7472.)
An experience external to the college for an advanced student in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. (9 Ext.)

RELIGION

NOTE: These courses carry a Dallas County Community College prefix of "RELI"; however, some can be identified by a common course number for transfer evaluation purposes. Both are listed in the course descriptions.)

RELI 1304 Major World Religions (3)
(Former course prefix/number REL 201. The common course number is PHIL 1304)
This course surveys the major world religions. Hinduism, Buddhism, Judaism, Islam, and Christianity are included. The history of religions is covered, but the major emphasis is on current beliefs. Other topics may also be included, such as the nature of religion, tribal religion, and alternatives to religion. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015235)

RELI 1316 Religion In American Culture (3)
(Former course prefix/number REL 101/RELI 1370)
This course examines the nature of religion in America. It covers important influences from the past and characteristics of current religious groups and movements. Emphasis is on understanding the role of religion in American life. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015135)

RELI 1317 The History And Literature Of The Bible (3)
(Former course prefix/number REL 105)
This course presents a history and literature of both the Hebrew people during the Old Testament period and the Christian movement during the New Testament period with emphasis upon the origins and development of the religious ideas and institutions of the biblical people. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015135)

RELI 2321 Contemporary Religious Problems (3)
(Former course prefix/number REL 102/RELI 1371)
Both classic and recent issues are explored. Such topics as the nature of religion, the existence of God, world religions, mysticism, sexuality and religion, and the interpretation of death are included. This course may be offered with emphasis on a specific topic, such as death and dying. (3 Lec.)
(Coordinating Board Academic Approval Number 3802015335)

RESERVE OFFICER TRAINING CORPS (ROTC): See Military Science

RESPIRATORY CARE

RSPT 1141 Respiratory Home Care/Rehabilitation (1)
(This is a WECM course number. Former course prefix/number RESP 2670)
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 12201, and RSPT 2310. Designed to develop an understanding of respiratory home care/rehabilitation equipment, procedures, and patient care, with emphasis on the use of special technology and equipment in the treatment of patients in a subacute and/or long term patient care setting. Laboratory fee. (2 Lab.)

RSPT 1213 Basic Respiratory Care Pharmacology (2)
(This is a WECM course number. Former course prefix/number RESP 1270)
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. A study of pharmacological principles/practices of drugs which affect the cardiopulmonary systems. Emphasis on classification, route of administration, dosages/calculations, and interaction of the autonomic nervous system. (2 Lec.)
RSPT 1227 Applied Physics for Respiratory Care (2)  
(This is a WECM course number. Former course prefix/number RESP 1470)  
Prerequisite: Admission to Respiratory Care Program; a grade of "C" in all courses in Semester I and Semester II; Elective course co-requisite if not completed previously. Exploration of the theoretical and practical applications of mathematics and physics with a focus on the applicability and clinical utility of the modalities, techniques, procedures, equipment, and diagnostic tests utilized in respiratory care. (2 Lec.)

RSPT 1260 Clinical-Respiratory Therapy Technician (2)  
(This is a WECM course number. Former course prefix/number RESP 1670)  
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (12 Ext.)

RSPT 1307 Cardiopulmonary Anatomy and Physiology (3)  
(This is a WECM course number. Former course prefix/number RESP 1370)  
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. An introduction to the anatomy and physiology of the cardiovascular, renal, and pulmonary systems. Includes the terminology used in respiratory physiology. (3 Lec.)

RSPT 1311 Respiratory Care Procedures II (3)  
(This is a WECM course number. Former course prefix/number RESP 1670)  
Prerequisite: A grade of "C" in RSPT 1227 and RSPT 1431. Provides student with the essential knowledge of airway care and mechanical ventilation. Airway care includes indications, techniques, equipment, and hazards and complications. Mechanical ventilation includes indications, initiation, modes, clinical application, management, complications, and weaning. Laboratory fee. (2 Lec., 3 Lab.)

RSPT 1431 Respiratory Care Fundamentals II (4)  
(This is a WECM course number. Former course prefix/number RESP 1670)  
Prerequisite: A grade of "C" in all courses in Semester I and Semester II, RSPT 1227, and Elective course. Provides a foundation for the development of knowledge and skills for respiratory care including lung expansion therapy, postural drainage and percussion, artificial airways, manual resuscitation devices, suctioning, pulse oximetry, bedside spirometry, arterial sampling techniques and blood gas analysis and interpretation. Laboratory fee. (2 Lec., 6 Lab.)

RSPT 2131 (Clinical) Simulations in Respiratory Care (1)  
(This is a WECM course number. Former course prefix/course number RESP 2670)  
Prerequisite: A grade of "C" in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201 and RSPT 2310. The theory and history of clinical simulation examinations. Topics include the construction types, scoring, and mechanics of taking the exam along with practice in taking both written and computerized simulations, and basic concepts of computer usage. (2 Lab.)

RSPT 2163 Clinical-Respiratory Therapy Technician (1)  
(This is a WECM course number. Former course prefix/number RESP 2670)  
Prerequisite: A grade of "C" in RSPT 1141, RSPT 2113, RSPT 2258, RSPT 2262, RSPT 2314, and RSPT 2453. A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (6 Ext.)

RSPT 2166 Practicum (or Field Experience) Respiratory Therapy Technician (1)  
(This is a WECM course number. Former course prefix/course number RESP 2670)  
Prerequisite: A grade of "C" in RSPT 1141, RSPT 2113, RSPT 2258, RSPT 2262, RSPT 2314, and RSPT 2453. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experience may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (10 Ext.)
RSPT 2201 Cardiopulmonary Assessment (2)
(This is a WECM course number. Former course prefix/course number RESP 2870)
Prerequisite: A grade of “C” in RSPT 1227 and RSPT 1413. Advanced concepts of the physical, radiological, hemodynamic, laboratory, and fluid/electrolyte assessment of patients with cardiopulmonary disease. (2 Lec.)

RSPT 2258 Advanced Respiratory Care Patient Assessment (2)
(This is a WECM course number. Former course prefix/number RESP 2370)
Prerequisite: A grade of “C” in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. Instruction in the integration of patient examination techniques, clinical lab studies, x-ray, pulmonary function, arterial blood gases, and invasive and non-invasive hemodynamics results in patient assessment. (1 Lec., 2 Lab.)

RSPT 2262 Clinical-Respiratory Therapy Technician (2)
(This is a WECM course number. Former course prefix/number RESP 2470 and RESP 1671)
Prerequisite: A grade of “C” in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. (12 Ext.)

RSPT 2310 Cardiopulmonary Disease (3)
(This is a WECM course number. Former course prefix/number RESP 1471)
Prerequisite: A grade of “C” in RSPT 1227 and RSPT 1431. A discussion of pathogenesis, pathology, history, prognosis, manifestations, and management of cardiopulmonary diseases. (3 Lec.)

RSPT 2314 Mechanical Ventilation (3)
(This is a WECM course number. Former course prefix/number RESP 1671 and RESP 2470)
Prerequisite: A grade of “C” in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. Preparation is conduct the therapeutic procedures to achieve adequate spontaneous and artificial ventilation with emphasis on ventilator classification, methods, principles, and operational characteristics. Also included are the indication, complications, and physiologic effects/principles of mechanical ventilation. Laboratory fee. (2 Lec., 3 Lab.)

RSPT 2453 Neonatal/Pediatric Cardiopulmonary Care (4)
(This is a WECM course number. Former course prefix/number RESP 2170 and RESP 2371)
Prerequisite: A grade of “C” in RSPT 1213, RSPT 1260, RSPT 1307, RSPT 1311, RSPT 2201, and RSPT 2310. A study of acute care, monitoring, and management as applied to the neonatal and pediatric patient. Laboratory fee. (3 Lec., 3 Lab.)

RUSSIAN

RUSS 1411 Beginning Russian (4)
(This is a common course number.)
This course focuses on basic conversation, grammar, reading and writing. Students will also be introduced to Russian culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.) (Coordinating Board Academic Approval Number 1604025131)

RUSS 1412 Beginning Russian (4)
(This is a common course number.)
Prerequisite: Russian 1411 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Russian 1411. Conversation, grammar, reading and writing are continued. Students will continue to study Russian culture, customs and institutions. Laboratory fee. (3 Lec., 2 Lab.) (Coordinating Board Academic Approval Number 1604025131)

RUSS 2311 Intermediate Russian (3)
(This is a common course number.)
Prerequisite: Russian 1411 and 1412 or the equivalent or demonstrated competence approved by the instructor. Reading, writing and intense oral practice are covered. Grammar is reviewed and expanded. The study of Russian culture is continued. (3 Lec.) (Coordinating Board Academic Approval Number 1604025231)

RUSS 2312 Intermediate Russian (3)
(This is a common course number.)
Prerequisite: Russian 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Russian 2311. Reading, writing and intense oral practice are continued. Grammar is reviewed and expanded. The study of Russian culture is continued. (3 Lec.) (Coordinating Board Academic Approval Number 1604025231)
SEMICONDUCTOR MANUFACTURING

CETT 1403 DC Circuits (4)  
(This is a WECM course number. Former course prefix/number ELET 1470.)  
DC Circuits is a study of the fundamentals of direct current including Ohm's law, Kirchhoff's laws and circuit analysis techniques. Emphasis on circuit analysis of resistive networks and DC measurements. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1405 AC Circuits (4)  
(This is a WECM course number. Former course prefix/number ELET 1471.)  
Suggested prerequisite: CETT 1403. AC Circuits is a study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1425 Digital Fundamentals (4)  
(This is a WECM course number. Former course prefix/number ELET 1473, ENGT 2471, or SEMI 1470.)  
An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1429 Solid State Devices (4)  
(This is a WECM course number. Former course prefix/number ELET 1472.)  
Suggested prerequisite: CETT 1403 and credit or concurrent enrollment in CETT 1405. Solid State Devices is a study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bias techniques, and thermal considerations of solid state devices. Laboratory fee. (3 Lec., 3 Lab.)

CETT 1457 Linear Integrated Circuits (4)  
(This is a WECM course number. Former course prefix/number ELET 2480, ENGT 2470, or SEMI 2470.)  
Suggested Prerequisite: CETT 1429. A study of the characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Application in computation, measurements, instrumentation, and active filtering. Laboratory fee. (3 Lec., 3 Lab.)

CETT 2337 Microcomputer Control (3)  
(This is a WECM course number. Former course prefix/number ENGT 2475 or SEMI 2371.)  
Suggested Prerequisite: CETT 1425. A study of microprocessors and microcomputers with an emphasis on embedded controllers for industrial and commercial applications. Topics include RAM, ROM and input/output (I/O) interfacing. Introduction to programming. Laboratory fee. (2 Lec., 2 Lab.)

ENTC 1380 Cooperative Education - Engineering Technology/Technician, General (3)  
(This is a WECM course number. Former course prefix/number SEMI 7371.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

ENTC 1445 Fluid Power (4)  
(This is a WECM course number. Former course prefix/number ELET 2472 or ENGT 1471.)  
Suggested Prerequisite: Credit or concurrent enrollment in MATH 1414 or the equivalent. A study of hydraulic and pneumatic systems including a review of schematic symbols, mechanical components, and operating principles. Interpretation of fluid power schematics and performance of calculations required to select components. Laboratory fee. (3 Lec., 3 Lab.)

ENTC 2380 Cooperative Education - Engineering Technology/Technician, General (3)  
(This is a WECM course number. Former course prefix/number ENGT 7371 or SEMI 7372.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Ext.)

INMT 1447 Industrial Automation (4)  
(This is a WECM course number. Former course prefix/number SEMI 1471.)  
Suggested Prerequisite: CETT 1405. A study of the applications of industrial automation systems including identification of system requirements, equipment integration, motors, controllers, and sensors. Coverage of set-up, maintenance, and testing of the automated systems. Laboratory fee. (3 Lec., 3 Lab.)
INTC 1307  Electronic Test Equipment  (3)
(This is a WECM course number. Former course prefix/number
ELET 1370 or ENGT 1472.)
Suggested Prerequisite: Credit or concurrent enrollment
in CETT 1405. A study of the theory and application of
analog and digital meters, oscilloscopes, frequency
generation, frequency measurements, and special
measuring instruments. Emphasis on accuracy and
limitations of instruments and calibration techniques.
Laboratory fee. (2 Lec., 3 Lab.)

QCTC 1343  Quality Assurance  (3)
(This is a WECM course number. Former course prefix/number
ELET 2272 or ENGT 1472.)
Suggested Prerequisite: Credit or concurrent enrollment
in MATH 1414 or the equivalent. Information on quality
assurance principles and applications; designed to
introduce the student to the quality assurance
profession. (3 Lec.)

SMFT 1343  Semiconductor Manufacturing
Technology I (3)
(This is a WECM course number. Former course prefix/number
ELET 2374 or SEMI 1370.)
A study of the processes, materials, and equipment used
in the manufacturing of semiconductors, including an
overview of the semiconductor industry, related
terminology, and standard safety practice. Laboratory
fee. (2 Lec., 2 Lab.)

SMFT 2343  Semiconductor Manufacturing II (3)
(This is a WECM course number. Former course prefix/number
ELET 2375 or SEMI 2370.)
Suggested Prerequisites: SMFT 1343 and CETT 1429.
The continuation of Semiconductor Manufacturing I
covering the processes, materials, and equipment used
in the manufacturing of semiconductors. Topics address
process-yield analysis and process troubleshooting.
Laboratory fee. (2 Lec., 2 Lab.)

SOCIAL WORK
(Social Work Associate Training)

CMSW 1353  Families Intervention Strategies (3)
(This is a WECM course number. Former course prefix/number
SWAT 2373 and EITP 1471.)
Overview of professionally recognized family intervention
systems. Topics include theorists in the field and
personal awareness. Family assessments and working
with the family as a system, in selecting health care
services. The intergenerational concepts are introduced.
(3 Lec.)

CMSW 1405  Nursing Home Activity Director (4)
(This is a WECM course number. Former course prefix/number
SWAT 2470 and EITP 1371).
Preparation for the role of Nursing Home Activity
Director. Development in appropriate skills, theory,
psychology, and record keeping to meet Texas
Department of Health requirements. Topics include
program planning, working in groups, developing an
activities department, and therapeutic techniques. (4
Lec., 1 Lab.)

CMSW 1505  Nursing Home Activity Director (5)
(This is a WECM course number. Former course prefix/number
SWAT 2471 and CDEC 1319).
Prerequisite: CMSW 1405. Preparation for the role of
Nursing Home Activity Director. Development in
appropriate skills, theory, psychology, and record
keeping to meet Texas Department of Health
requirements. Topics include program planning, working
in groups, developing an activities department, and
therapeutic techniques. The course focuses on how to
apply management science principles to the delivery of
activities. (5 Lec.)

DAAC 1304  Pharmacology of Addiction (3)
(This is a WECM course number. Former prefix/number SCAT
1370).
Psychological, physiological, and sociological effects of
mood altering substances and behaviors and their
implications for the addiction process are discussed.
Emphasis on pharmacological effects of tolerance,
dependency/withdrawal, cross addiction, and drug
addiction. (3 Lec.)

DAAC 1307  Addicted Family Intervention (3)
(This is a WECM course number. Former prefix/number SCAT
2372).
The student will discuss and explain the family as a
dynamic system; explain the effects of addiction on the
dynamics of a family system; and describe and
differentiate between various family treatment processes
and their applicability to traditional and nontraditional
family systems. The student will discuss the impact of
mood altering substances and behaviors as they relate
to the family from a multicultural and transgenerational
perspective; and discuss the role of the family in the
addictive and recovery process. (3 Lec.)

DAAC 1311  Counseling Theories (3)
(This is a WECM course number. Former prefix/number SCAT
1371).
An introduction to major theories of various treatment
modalities including Reality Therapy, Psycho-dynamic,
grief therapy, Client-centered therapy, Rational-Emotive
Therapy, Cognitive-behavioral approaches such as life
skills training, behavior modification, and the introduction
to experimental therapies as they relate to detoxification,
residential, outpatient, and extended treatment. Ethical
issues will be reviewed. (3 Lec.)
DAAC 1319 Introduction to Alcohol and Other Drug Addictions (3)
(This is a WECM course number. Former course prefix/number SCAT 2371).
Cause and consequences of addiction as they relate to the individual, family, community, and society are discussed. Response alternatives regarding intervention, treatment, education, and prevention are reviewed. Competencies and requirements for licensure in Texas are explained. Addiction issues related to diverse populations are presented. (3 Lec.)

DAAC 1341 Counseling Alcohol and Other Drug Addictions (3)
(This is a WECM course number. Former course prefix/number SCAT 2370).
This course will focus on special skills and techniques in the application of counseling skills for the Alcohol and Other Drug (AOD) client. Design and utilization of treatment planning using a treatment team approach will be introduced. Confidentiality and ethical issues will be reviewed and practiced. (3 Lec.)

DAAC 1343 Current Issues (3)
(This is a WECM course number. Former course prefix/number SCAT 2373).
A study of issues that impact addiction counseling. Special populations, dual diagnosis, ethics, gambling, and infectious diseases associated with addiction counseling will be investigated. The focus is to examine the various cultural strategies for counseling diverse clients. (3 Lec.)

DAAC 2366 Practicum (or Field Experience)-Alcohol/Drug Abuse Counseling (3)
(This is a WECM course number. Former course prefix/number SCAT 7472).
Prerequisite DAAC 1304, 1307, 1311, 1341, 1343 and SCWK 2311, and SCWK 1305. The 336 contact hours must be completed at an approved practicum site. Practical general training and experiences in the workplace. The college with the employer develops the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Roundtable seminar mandatory. (1 Lec., 20 Ext.)

GERS 1301 Introduction to Gerontology (3)
(This is a WECM course. Former course prefix/number SWAT 2372 and CDEC1302).
Overview of the social, psychological, and biological changes that accompany aging and an overview of the implications of these changes for the individual, as well as for the larger society. The student will compare and contract the different views of aging presented by the disciplines of biology, sociology, and psychology; demonstrate an understanding of the demographic changes due to aging experiences in the United States. The student will articulate the impact of an aging population on key social institutions such as the family, the economy, the political system, and the health care industry; effectively rebut key misconceptions regarding aging and the elderly; and identify potential career choices in gerontology. (3 Lec.)

GERS 1392 Special Topics in Gerontology (3)
(This is a WECM course. Former course prefix/number SWAT 1373 and CDEC 2375).
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local occupational need and business and industry trends. (3 Lec.)

ITSC 1401 Introduction to Computers (4)
(This is a WECM number. Former course prefix/number CISC 1470).
Prerequisite: Keyboarding proficiency. Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and application in business and other segments of society. Fundamentals of computer problem-solving and programming may be discussed and applied. Examines applications and software relating to a specific curricular area. Laboratory fee. (3 Lec., 4 Lab.)

SCWK 1301 Adolescent Life Cycle (3)
(This is a WECM course number. Former course prefix/number SWAT 1374).
Study of the developmental phases from adolescence through young adulthood and the tasks and goals to be achieved during these stages. Topics include physiological and psychological changes, interpersonal relationships, and the individual's ability to relate to the social environment. Emphasis on critical areas of the adolescent period of the life cycle. (3 Lec.)
SCWK 1305 Group Work Intervention (3)
(This is a WECM course number. Former course prefix/number SWAT 2377).
Examination of the various stages of the group work treatment process with emphasis on roles, tasks, and potential problem areas. Topics include mechanics of group function, structure of groups, communication patterns within groups, effective group facilitation skills, and techniques used to address special population issues and needs. (3 Lec.)

SCWK 1313 Introduction to Social Work (3)
(This is a WECM course number. Former course prefix/number SWAT 2370).
An overview of the social work profession and introduction to the terms, concepts, people, and critical events that have shaped the profession. Topics include the role of the National Association of Social Workers (NASW) and the Council on Social Work Education (CSWE) in maintaining and strengthening social work education and standards; the importance of human service agencies in fostering or diminishing the quality of services; and developing an understanding of poverty and the impact of institutional racism, sexism, ageism. (3 Lec.)

SCWK 1321 Orientation to Social Services (3)
(This is a WECM course number. Former course prefix/number SWAT 1370).
Introduction to the basic concepts, information, and practices within the field of social services. Topics include a survey of the historical development of social services; social, legal, and clinical definitions, and review of current information regarding indications for and methods of treatment and/or services. (3 Lec.)

SCWK 1364 Practicum (or Field Experience)- Social Work (3)
(This is a WECM course number. Former course prefix/number SWAT 7371).
Prerequisites: SCWK 1305, SCWK 1313, SCWK 1321, SCWK 2311, and SCWK 2301. The 336 contact hours must be completed at an approved practicum site. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experience to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Roundtable seminar mandatory. (1 Lec., 20 Ext.)

SCWK 1365 Practicum (or Field Experience) - Social Work (3)
(This is a WECM course number. Former course prefix/number SWAT 7372 and SWAT 7371).
Prerequisite: SCWK 1305, SCWK 1313, SCWK 1321, SCWK 2311, and SCWK 2301. The 336 contact hours must be completed at an approved practicum site. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. Roundtable seminar mandatory. (1 Lec., 20 Ext.)

SCWK 2301 Assessment and Case Management (3)
(This is a WECM course number. Former course prefix/number SWAT 2375).
Exploration of procedures to identify and evaluate an individual’s and/or family’s strengths, weaknesses, problems, and needs in order to develop an effective plan of action. Topics include oral and written communications essential for assessment, screening, intervention, client information, and referral. (3 Lec.)

SCWK 2305 Special Problems of Youth (3)
(This is a WECM course number. Former course prefix/number SWAT 2374).
Examination of the particular problems of youth and their implications for social service workers delivering services to this population. Topics include youth serving in social institutions of both a preventative and rehabilitative nature and issues related to alcohol, tobacco, and other drugs and their effects. (3 Lec.)

SCWK 2307 Human Behavior and the Social Environment (3)
(This is a WECM course number. Former course prefix/number SWAT 2378).
A basic framework for creating and organizing knowledge of human behavior and the social environment. Introduction of social system, life span, and strength approaches to understanding human behavior and environment impact. Emphasis on the impact of human diversity, discrimination, and oppression on the individual's ability to reach or maintain optimal health and well-being. (3 Lec.)
SCWK 2311 Interviewing and Counseling Theories (3)  
(This is a WECM course number. Former course prefix/number SWAT 1371).  
An introduction to Major theories of various treatment modalities including client-centered, psychodynamic, rational-emotive, and reality therapy. Topics include cognitive/behavioral approaches such as behavior modification, life skills training, and an introduction to experimental therapies. (3 Lec.)

SCWK 2331 Abnormal Behavior (3)  
(This is a WECM course number. Former course prefix/number SWAT 1372).  
An introduction to the literature concerning maladaptive behavior including characteristics, classification, diagnosis, and treatment modalities. Topics include factors associated with defining and identifying abnormal behavior. (3 Lec.)

SOCIOLOGY

SOCI 1301 Introduction To Sociology (3)  
(This is a common course number. Former course prefix/number SOC 101).  
This course is a sociological study of social behavior and social structures, emphasizing the importance of a knowledge and appreciation of the multi-cultural and multiethnic dimensions of society. Topics include cultural elements such as values, norms, beliefs, language, and roles, as well as group processes, social conflict and social change. (3 Lec.)  
(Coordinating Board Academic Approval Number 4511015142)

SOCI 1306 Social Problems (3)  
(This is a common course number. Former course prefix/number SOC 102).  
This course is a sociological study of social problems which typically include: crime, poverty, minorities, deviance, population, and health care. Specific topics may vary from semester to semester to address contemporary concerns. (3 Lec.)  
(Coordinating Board Academic Approval Number 4511015242)

SOCI 2301 Marriage, Family, and Close Relationships (3)  
(This is a common course number. Former course prefix/number SOC 203).  
Prerequisite: Sociology 1301 recommended. Marriage, choosing of a partner, love and attachment, parenting, communication, conflict and conflict resolution are analyzed. Family forms, relationships, and functions are included. Sociocultural differences in close relationships and family behavior are also included. (3 Lec.)  
(Coordinating Board Academic Approval Number 4511015442)

SOCI 2306 Human Sexuality (3)  
(This is a common course number. Former course prefix/number SOC 103).  
Students may register for either Psychology 2306 or Sociology 2306 but receive credit for only one of the two. Topics include physiological, psychological, and sociological aspects of human sexuality. (3 Lec.)  
(Coordinating Board Academic Approval Number 4201015342)

SOCI 2319 Race, Ethnicity and Community (3)  
(This is a common course number. Former course prefix/number SOC 204).  
This course focuses on cultural, social, and institutional factors affecting relationships within and among ethnic, cultural, and racial groups. Emphasis is on current problems of intergroup relations, social movements, and related social changes, as well as community building and conflict resolution. The historic contributions of the groups may be presented. (3 Lec.)  
(Coordinating Board Academic Approval Number 4511015342)

SOCI 2320 Field Studies In American Minorities (3)  
(This is a common course number. Former course prefix/number SOC 204).  
Prerequisite: Sociology 1301 or Sociology 2319. Experience is provided in various minority community centers. Work is under professional supervision in a task-oriented setting. (3 Lec.)  
(Coordinating Board Academic Approval Number 4511015342)

SOCI 2326 Social Psychology (3)  
(This is a common course number. Former course prefix/number SOC 207).  
Prerequisite: Psychology 2301 or Sociology 1301. Students may register for either Psychology 2319 or Sociology 2326 but may receive credit for only one. Theories of individual behavior in the social environment are surveyed. Topics include the socio-psychological process, attitude formation and change, interpersonal relations, and group processes. (3 Lec.)  
(Coordinating Board Academic Approval Number 4216015140)

SOCI 2370 Selected Topics (3)  
(Former course prefix/number SOC 209).  
Prerequisite: Sociology 1301 or demonstrated competence approved by the instructor. An in-depth study of specific contemporary topics in sociology such as popular culture (including sports, religion and mass media), the military as a social institution, education, medicine, ethnographic film, apartheid, deviance or formal organizations. This course may be repeated for credit when topics vary. (3 Lec.)  
(Coordinating Board Academic Approval Number 4511015742)
SOCI 2371 Urban Social Problems (3)
(Former course prefix/number SOC 231)
The sociology of social institutions is studied. Topics include urbanization, theories of formation, and the impact of urbanization on the individual. (3 Lec.)
(Coordinating Board Academic Approval Number 4511015742)

SOCI 2389 Applied Sociology Practicum (3)
(This Is a common course number. Former course prefix/number SOC 232)
An instructional program designed to integrate on-campus study with practical field experience in sociology. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of human social behavior, and/or social institutions, and in the practice of community service. This course may be repeated for credit when field experiences vary. (1 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 4501015142)

SPANISH

SPAN 1100 Spanish Conversation (1)
(Former course prefix/number SPA 107)
Prerequisite: Spanish 1411 or Spanish 1412. The course is a further exploration of the Spanish language. This course consists of creative problem-solving utilizing the basic elements of the Spanish language. This course may be repeated for credit. Laboratory fee. (2 Lab.)
(Coordinating Board Academic Approval Number 1609055431)

SPAN 1311 Beginning Spanish (3)
(This Is a common course number.)
This course is an introduction to Spanish speaking, comprehension, reading, writing and grammar. Cultural insights are also presented. Emphasis is on pronunciation, comprehension, and oral expression. It is strongly recommended that students who plan to study Spanish for more than one semester enroll in Spanish 1411 which includes an extra hour of lab per week (and an extra hour of credit for the course). Students who successfully complete Spanish 1311 and wish to continue their studies of Spanish may register for Spanish 1412. Laboratory fee. (3 Lec., 1 Lab.)
(Coordinating Board Academic Approval Number 1609055131)

SPAN 1411 Beginning Spanish (4)
(This Is a common course number. Former course prefix/number SPA 101)
The essentials of grammar and easy idiomatic prose are studied. Emphasis is on pronunciation, comprehension, and oral expression. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609055131)

SPAN 1412 Beginning Spanish (4)
(This Is a common course number. Former course prefix/number SPA 102)
Prerequisite: Spanish 1411 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 1411. Emphasis is on idiomatic language and complicated syntax. Laboratory fee. (3 Lec., 2 Lab.)
(Coordinating Board Academic Approval Number 1609055131)

SPAN 2306 Spanish Conversation I (3)
(This Is a common course number. Former course prefix/number SPA 207)
Prerequisite: Spanish 1411 and Spanish 1412 or the equivalent. This course is designed to strengthen and improve oral skills in the language. Oral activities focus on current events, cultural, historical and social issues. Audio-visual media are used to explore Hispanic life and society. This course is intended to complement Spanish 2311. The next course in this conversation sequence is Spanish 2370. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055431)

SPAN 2311 Intermediate Spanish (3)
(This Is a common course number. Former course prefix/number SPA 201)
Prerequisite: Spanish 1412 or the equivalent or demonstrated competence approved by the instructor. Reading, composition, and intense oral practice are covered. Grammar is reviewed. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055231)

SPAN 2312 Intermediate Spanish (3)
(This Is a common course number. Former course prefix/number SPA 202)
Prerequisite: Spanish 2311 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 2311. Contemporary literature and composition are studied. Grammar is reviewed and expanded. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055231)

SPAN 2321 Introduction To Spanish Literature (3)
(This Is a common course number. Former course prefix/number SPA 203)
Prerequisite: Spanish 2312 or the equivalent or demonstrated competence approved by the instructor. This course is an introduction to Spanish literature. It includes readings in Spanish literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055331)
SPAN 2322 Introduction To Spanish Literature (3)
(This is a common course number. Former course prefix/number
SPA 204)
Prerequisite: Spanish 2312 or the equivalent or demonstrated competence approved by the instructor. This course is a continuation of Spanish 2321. It includes readings in Spanish literature, history, culture, art, and civilization. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055331)

SPAN 2370 Spanish Conversation II (3)
(Former course prefix/number SPA 208)
Prerequisite: Spanish 2306 or Spanish 2311 or the equivalent. This course is designed to further strengthen and improve oral skills in the language. Oral activities will continue to focus on current events, cultural, historical and social issues. Audio-visual media are used to explore Hispanic life and society. This course is intended to complement Spanish 2312. (3 Lec.)
(Coordinating Board Academic Approval Number 1609055431)

SPAN 2371 Spanish for Business I (3)
(Former course prefix/number SPA 211)
Prerequisite: Spanish 2311 or the equivalent. This course exposes students to the Spanish language used in business including the terminology and idioms of Spanish business language in special oral and written communication. Emphasis is placed on the structure and content of Spanish business correspondence. Authentic materials are used to give students a contemporary view of business as it is conducted in Hispanic society. This course is not a substitute for Spanish 2311 or 2312. (3 Lec.)
(Coordinating Board Academic Approval Number 1609059413. This is a unique need course.)

SPAN 2372 Spanish for Business II (3)
(Former course prefix/number SPA 212)
Prerequisite: Spanish 2371 or the equivalent. This course is devoted to the continued development of business language skills with a focus on the accurate use of business vocabulary and business style. Emphasis is on preparing students to function in Spanish in a business setting via practice of receptive and productive linguistic skills. The course also provides training in cross-cultural communication skills and is designed to help students achieve levels of proficiency to meet foreign language needs for business and international trade. This course is not a substitute for Spanish 2311 or 2312. (3 Lec.)
(Coordinating Board Academic Approval Number 1609059413. This is a unique need course.)

SPEECH COMMUNICATION

SPCH 1144 Speech Communication Laboratory (1)
(This is a common course number. Former course prefix/number
SC 100)
This laboratory course focuses on students applying speech communication skills through service projects, internships, and leadership activities. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 2310016035)

SPCH 1145 Speech Communication Workshop (1)
(This is a common course number. Former course prefix/number
SC 110)
This laboratory course offers students a wide variety of applied speech communication experiences. This course may be repeated four times for credit. (2 Lab.)
(Coordinating Board Academic Approval Number 2310016035)

SPCH 1311 Introduction To Speech Communication (3)
(This is a common course number. Former course prefix/number
SC 101)
Theory and practice of speech communication behavior in one-to-one, small group, and public communication situations are introduced. Students learn more about themselves, improve skills in communicating with others, and prepare and deliver formal public speeches. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015135)

SPCH 1315 Fundamentals Of Public Speaking (3)
(This is a common course number. Former course prefix/number
SC 105)
Public speaking is introduced. Topics include the principles of reasoning, audience analysis, collection of materials, outlining, and delivery. Emphasis is on the oral presentation of well prepared speeches. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015335)

SPCH 1318 Interpersonal Communication (3)
(This is a common course number. Former course prefix/number
SC 203)
This course presents theories and exercises in verbal and nonverbal communication with focus on interpersonal relationships. (3 Lec.)
(Coordinating Board Approval Number 2310015435)

SPCH 1321 Business And Professional Communication (3)
(This is a common course number. Former course prefix/number
SC 209)
Theories and skills of speech communication as applied to business and professional situations will be studied. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015235)
SPCH 1342 Voice And Articulation (3)
(This is a common course number. Former course prefix/number SC 108)
Students may register for either Speech Communication 1342 or Drama 2336 but may receive credit for only one of the two. The mechanics of speech are studied. Emphasis is on improving voice and pronunciation. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015835)

SPCH 2144 Forensic Workshop (1)
(This is a common course number. Former course prefix/number SC 201)
This course focuses on preparing speeches, readings, and debate propositions. Presentations are made in competition and before select audiences. This course may be repeated for credit. (3 Lab.)
(Coordinating Board Academic Approval Number 2310016035)

SPCH 2335 Discussion And Debate (3)
(This is a common course number. Former course prefix/number SC 205)
Public discussion and argumentation are studied. Both theories and techniques are covered. Emphasis is on evaluation, analysis, and logical thinking. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015935)

SPCH 2341 Performance of Literature (3)
(This is a common course number. Former course prefix/number SC 206)
Various types of literature are examined. Practice is provided in preparing and presenting selections orally. Emphasis is on individual improvement. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015735)

SPCH 2370 Group Interpretation (3)
(Former course prefix/number SC 206)
This course offers practical experience in sharing fiction and nonfiction selections with audiences. Various types of literature are studied for group presentation. Emphasis is on selecting, cutting, and arranging prose and poetry, and applying reader's theatre techniques to group performance of literature. (3 Lec.)
(Coordinating Board Academic Approval Number 2310015735)

SPCH 2389 Academic Cooperative in Communication (3)
(This is a common course number. Former course prefix/number SC 211)
This instructional program is designed to integrate on-campus study with practical hands-on work experience in Communication. In conjunction with class seminars, the student will set specific goals and objectives in the study of Communication. This course may be repeated for credit. (1 Lec., 4 Lab.)
(Coordinating Board Academic Approval Number 2401035230)

SUBSTANCE ABUSE

(Substance Abuse Counselor Training)

CMSW 1327 Treatment Modalities with Special Populations (3)
(This is a WECM course number.)
Introduces the most commonly used and accepted treatment methods in the mental health and mental retardation field. Explores the role of the social service worker and treatment modalities utilized in the outpatient, inpatient, and day treatment areas as they apply to different special populations. (3 Lec.)

DAAC 1304 Pharmacology of Addiction (3)
(This is a WECM course number. Former prefix/number SCAT 1370).
Psychological, physiological, and sociological effects of mood altering substances and behaviors and their implications for the addiction process are discussed. Emphasis on pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug addiction. (3 Lec.)

DAAC 1307 Addicted Family Intervention (3)
(This is a WECM course number. Former prefix/number SCAT 2372).
The student will discuss and explain the family as a dynamic system; explain the effects of addiction on the dynamics of a family system; and describe and differentiate between various family treatment processes and their applicability to traditional and nontraditional family systems. The student will discuss the impact of mood altering substances and behaviors as they relate to the family from a multicultural and transgenerational perspective; and discuss the role of the family in the addictive and recovery process. (3 Lec.)

DAAC 1311 Counseling Theories (3)
(This is a WECM course number. Former course prefix/number SCAT 1371).
An introduction to major theories of various treatment modalities including Reality Therapy, Psycho-dynamic, grief therapy, Client-centered therapy, Rational-Emotive Therapy, Cognitive-behavioral approaches such as life skills training, behavior modification, and the introduction to experimental therapies as they relate to detoxification, residential, outpatient, and extended treatment. (3 Lec.)
DAAC 1319 Introduction to Alcohol and Other Drug Addictions (3)
(This is a WECM course number. Former course prefix/number SCAT 2371).
Cause and consequences of addiction as they relate to the individual, family, community, and society are discussed: Response alternatives regarding intervention, treatment, education, and prevention are reviewed. Competencies and requirements for licensure in Texas are explained. Addiction issues related to diverse populations are presented. (3 Lec.)

DAAC 1341 Counseling Alcohol and Other Drug Addictions (3)
(This is a WECM course number. Former course prefix/number SCAT 2370).
This course will focus on special skills and techniques in the application of counseling skills for the Alcohol and Other Drug (AOD) client. Design and utilization of treatment planning using a treatment team approach will be introduced. Confidentiality and ethical issues will be reviewed and practiced. (3 Lec.)

DAAC 1343 Current Issues (3)
(This is a WECM course number. Former course prefix/number SCAT 2373).
A study of issues that impact addiction counseling. Special populations, dual diagnosis, ethics, gambling, and infectious diseases associated with addiction counseling will be investigated. The focus is to examine the various cultural strategies for counseling diverse clients. (3 Lec.)

DAAC 2366 Practicum (or Field Experience) - Alcohol/Drug Abuse Counseling (3)
(This is a WECM course number. Former course prefix/number SCAT 7472).
Prerequisite DAAC 1304, 1307, 1311, 1341, 1343 and SCWK 2311, and SCWK 1305. The 336 contact hours must be completed at an approved practicum site. Practical general training and experiences in the workplace. The college with the employer develops the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Roundtable seminar mandatory. (1 Lec., 20 Ext.)

SURGICAL TECHNOLOGIST

SRGT 1166 Practicum-Surgical/Operating Room Technician (1)
(This is a WECM course number. Former course prefix/number SGTC 1870.)
Prerequisites: Acceptance to the Surgical Technologist program and a minimum "C" grade or better in English 1301, Speech Communication 1311, Biology 1470, Health Professions and Related Sciences 1204 and Health Professions and Related Sciences 2231. Concurrent enrollment in, or a minimum "C" grade or better in Biology 1472 and Health Professions and Related Sciences 2300. Concurrent enrollment in Surgical Technology 1405 and 1409. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates to the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (10 Ext.)

SRGT 1201 Medical Terminology (2)
(This is a WECM course number. Former course prefix/number SGTC 1270.)
Study of basic structure of medical words including prefixes, suffixes, roots, combining forms, plurals, pronunciation, spelling, and the definitions of medical terms. Emphasis is on building a professional vocabulary required for employment with the allied health care field. May be taken as a continuing education course. (2 Lec.)

SRGT 1367 Practicum-Surgical/Operating Room Technician (3)
(This is a WECM course number. Former course prefix/number SGTC 1070.)
Prerequisites: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technology course work. Concurrent enrollment in, or a minimum "C" grade or better in Health Professions and Related Sciences 1202. Concurrent enrollment in Surgical Technology 1441 and 1442. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (21 Ext.)
SRGT 1405 Introduction to Surgical Technology (4)
(This is a WECM course number. Former course prefix/number SGTC 1870.)
Prerequisites: Acceptance to the Surgical Technologist program and a minimum "C" grade or better in English 1301, Speech Communication 1311, Biology 1470, Health Professions and Related Sciences 1204 and Health Professions and Related Sciences 2231. Concurrent enrollment in, or a minimum "C" grade or better in Biology 1472 and Health Professions and Related Sciences 2300. Concurrent enrollment in Surgical Technology 1409 and 1166. Orientation to surgical technology theory, surgical pharmacology and anesthesia, and patient care concepts. Laboratory fee. (3 Lec., 4 Lab.)

SRGT 1409 Fundamentals of Aseptic Technique (4)
(This is a WECM course number. Former course prefix/number SGTC 1870.)
Prerequisites: Acceptance to the Surgical Technologist program and a minimum "C" grade or better in English 1301, Speech Communication 1311, Biology 1470, Health Professions and Related Sciences 1204 and Health Professions and Related Sciences 2231. Concurrent enrollment in, or "C" grade or better in Biology 1472 and Health Professions and Related Sciences 2300. Concurrent enrollment in Surgical Technology 1405 and 1166. In-depth coverage of aseptic technique principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. Laboratory fee. (3 Lec., 4 Lab.)

SRGT 1441 Surgical Procedures I (4)
(This is a WECM course number. Former course prefix/number SGTC 1070.)
Prerequisites: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technology course work. Concurrent enrollment in, or a minimum "C" grade or better in Health Professions and Related Sciences 1202. Concurrent enrollment in Surgical Technology 1442 and 1367. Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the general, OB/GYN, genitourinary, and orthopedic surgical specialities incorporating instruments, equipment, and supplies required for safe patient care. (4 Lec.)

SRGT 1442 Surgical Procedures II (4)
(This is a WECM course number. Former course prefix/number SGTC 1070.)
Prerequisites: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technology course work. Concurrent enrollment in, or a minimum "C" grade or better in Health Professions and Related Sciences 1202. Concurrent enrollment in Surgical Technology 1441 and 1367. Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the thoracic, peripheral vascular, plastic/reconstructive, EENT, cardiac, and neurological surgical specialities incorporating instruments, equipment, and supplies required for safe patient care. (4 Lec.)

SRGT 2171 Surgical Technologist - Seminar (1)
(This is a WECM course number. Former course prefix/number SGTC 1171.)
Prerequisites: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technology course work. Concurrent enrollment in Surgical Technology 2266. This course focuses on issues and special situations a student may face as a surgical technologist. Role transition from student to employee is incorporated. A capstone exam is included. (1 Lec.)

SRGT 2266 Practicum-Surgical/Operating Room Technician (2)
(This is a WECM course number. Former course prefix/number SGTC 1870.)
Prerequisites: A minimum "C" grade or better in all prerequisite and previous semester support and Surgical Technology course work. Concurrent enrollment in 2171. Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. (20 Ext.)

THEATRE
(See Drama and Dance)
TRAVEL, EXPOSITION AND MEETING MANAGEMENT

TRVM 1166 Practicum - Travel and Tourism (1)
(This is a WECM course number.)
Suggested Prerequisite: TRVM 1300. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experience may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (7 Ext.)

TRVM 1191 Special Topics in Travel and Tourism (1)
(This is a WECM course number. Former course prefix/number TRAV 1171.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (1 Lec., 16 Ext.)

TRVM 1266 Practicum - Travel and Tourism (2)
(This is a WECM course number.)
Suggested Prerequisite: TRVM 1300. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experience may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (14 Ext.)

TRVM 1291 Special Topics in Travel and Tourism (2)
(This is a WECM course number. Former course prefix/number TRAV 1273.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 2 Lab.)

TRVM 1300 Introduction to Travel and Tourism (3)
(This is a WECM course number. Former course prefix/number TRAV 1370.)
An overview of the travel industry. Emphasis on travel careers and the impact on society. In addition, this course includes transportation, lodging, hospitality, cruise, group tours, parks, convention centers, governmental agencies, and associations. (3 Lec.)

TRVM 1308 Travel Destinations I – Western Hemisphere (3)
(This is a WECM course number. Former course prefix/number TRAV 1375.)
Study of countries located in the Western Hemisphere including Canada, United States, Latin America, South America, and the Caribbean Islands. Emphasis on the culture, customs, climate, physical features, language, currency, tourist, and seasonal attractions. In addition this course includes the study of tourism destination including natural and man-made attractions in each country. (3 Lec.)

TRVM 1323 Group Tour Operations (3)
(This is a WECM course number.)
A study of the role of the group planner, selling to groups, and planning itineraries, including components of a tour package, tour costing, advertising, and promotion, group dynamics, and tour guide qualifications. (3 Lec.)

TRVM 1325 Exposition and Trade Show Management (3)
(This is a WECM course number. Former course prefix/number TRAV 1372.)
A broad-based introduction to the principles and skills required for the management of expositions. Examination of the fundamental business philosophy of expositions and their position in the marketplace. An overview of the major issues in exposition management including needs assessment, budget strategies, site selection, floor plan development, contractor relationships, sales and marketing and related management issues. (3 Lec.)

TRVM 1327 Hospitality and Special Events (3)
(This is a WECM course number.)
Focus on planning and managing special events in the meeting planning area. An overview of the entire sequence of events from conceptual stage of the first meeting through completion of the event. Emphasis on technical planning skills including site selection, negotiating with suppliers, devising meeting specifications, preparing a budget, and working with facility staff to manage a successful event. (3 Lec.)

TRVM 1331 Introduction to Hospitality Industry (3)
(This is a WECM course number.)
An exploration of the hospitality industry with emphasis on history and development. Topics include food, beverage, and lodging management. (3 Lec.)
TRVM 1341 Travel Destinations II - Eastern Hemisphere (3)
(This is a WECM course number. Former course prefix/number TRAV 2372.)
Study of countries located in the Eastern Hemisphere including Europe, Asia, Africa, Middle East, Commonwealth of Independent States, Australia, and New Zealand. Emphasis on the culture, customs, climate, physical features, language, currency, tourist and specific seasonal attractions. In addition this course will include the study of tourism destinations including natural and man-made attractions in countries located in the Eastern Hemisphere. (3 Lec.)

TRVM 1345 Travel and Tourism Sales and Marketing Techniques (3)
(This is a WECM course number. Former course prefix/number TRAV 1371.)
A study of marketing, sales techniques, promotions, and advertising theories as applied to the travel and tourism industry. Coverage of the marketing mix in travel, market segmentation, market planning, and the use of advertising and other communication techniques. Emphasis on buyer motivation, telephone sales techniques, profitable travel counseling, and the use of promotional material in selling travel. (3 Lec.)

TRVM 1349 Travel Operations I (3)
(This is a WECM course number. Former course prefix/number TRAV 1274.)
A study of manual travel agency operations and basic hands-on computerized reservation techniques in manual travel agency operations; emphasis on making air, hotel, tour and cruise reservations, writing itineraries, reading and interpreting brochures, and ticketing rules, credit card sales, ticket refunds, exchanges, and reissues. Topics include building a simple Passenger Name Record on an airline computer reservation system, accessing availability, fares and miscellaneous related information. Laboratory fee. (2 Lec., 3 Lab.)

TRVM 1391 Special Topics in Travel and Tourism (3)
(This is a WECM course number. Former course prefix/number TRAV 1374.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. (3 Lec.)

TRVM 2301 Introduction to Convention/Meeting Management (3)
(This is a WECM course number. Former course prefix/number TRAV 1170.)
Overview of the meetings and conventions industry and the various aspects and skills involved in planning and managing meetings and conventions. Emphasis on types of meetings, meeting markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, functions and meeting room setup, and audiovisual requirements. (3 Lec.)

TRVM 2331 Convention and Exposition Law and Ethics (3)
(This is a WECM course number. Former course prefix/number TRAV 1270.)
Application of general legal principles and statutory requirement for meetings, conventions and trade shows. Emphasis on ethical considerations to problems faced by meeting planners, hotels, and convention centers in the negotiation and implementation of agreements for meetings and similar events. In addition this course will cover legal issues for travel and suppliers. (3 Lec.)

TRVM 2333 Applied Convention/Meetings Management (3)
(This is a WECM course number. Former course prefix/number TRAV 2373.)
Suggested Prerequisite: TRVM 2301. Discussion of meeting planning with emphasis on the key areas of meeting management. Topics include needs assessment, identifying meeting objectives, program development, facility selection, negotiations, contracts, meeting and function space set-up, promotion and publicity, budgeting, evaluation, and legal issues. (3 Lec.)

TRVM 2341 International Meeting Management (3)
(This is a WECM course number. Former course prefix/number TRAV 2374.)
Suggested Prerequisite: TRVM 2301. A discussion of meeting planning notes and responsibilities in an international context. Topics address foreign currency, customs and laws, shipping, international planning resources, marketing, and language interpretation. (3 Lec.)

TRVM 2343 Exposition Service Contracting (3)
(This is a WECM course number. Former course prefix/number TRAV 2375.)
Suggested Prerequisite: TRVM 1325. A study of logistical support systems of expositions and trade shows. Topics include designing floor plans, installation and dismantling of exhibits, freights, and drayage abilities, contracting labor, and working with unions. Instruction in selecting service contractors and hall management. (3 Lec.)
TRVM 2355 Exposition and Trade Show Operations (3)
(This is a WECM course number. Former course prefix/number TRAV 2376.)
Suggested Prerequisite: TRVM 1325. A discussion of management of the specific problems of trade shows and exhibitions, including design, construction, and regulation. Logistics for planning events, including crowd control, special effects, lighting, decorations and audio. Procedures for conduction fairs, festivals, sporting events, and grand openings. (3 Lee.)

TRVM 2367 Practicum - Travel and Tourism (3)
(This is a WECM course number.)
Suggested Prerequisite: TRVM 1300. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experience may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (21 Ext.)

TRVM 2380 Cooperative Education - Travel and Tourism (3)
(This is a WECM course number. Former course prefix/number TRAV 7371.)
Suggested Prerequisite: Student must have completed basic courses including: TRVM 1300 and TRVM 2301. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between college, employer and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Ext.)

TRVM 2437 Travel Industry Operations II (4)
(This is a WECM course number. Former course prefix/number TRAV 2273.)
Prerequisite: TRVM 1349. Continuation of the study of airline computer reservation systems. Emphasis on reserving cars and hotels, using queues, creating passenger profiles, interpreting air fares, rules and routing, and explaining these to a passenger. Laboratory fee. (3 Lec., 2 Lab.)

TRVM 2467 Practicum - Travel and Tourism (4)
(This is a WECM course number.)
Suggested Prerequisite: TRVM 1300. Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experience may be for pay or no pay. This course may be repeated if topics and learning outcomes vary. (28 Ext.)

VETERINARY TECHNOLOGY

VTHT 1105 Veterinary Medical Terminology (1)
(This is a WECM course number. Former course prefix/number VETT 1170.)
Introduction to word parts, directional terminology, and analysis of common veterinary terms. The student will define, apply, and analyze common veterinary terms. (1 Lec.)

VTHT 1317 Veterinary Office Management (3)
(This is a WECM course number.)
Practical experience in management of the veterinary hospital. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment. The student will demonstrate effective client relation, communication, and computer skills; apply basic business principles such as the proper maintenance of medical records; and display employment skills including interviewing, resume writing, and proper dress. (3 Lec.)

VTHT 1321 Equine Reproduction (3)
(This is a WECM course number. Former course prefix/number VETT 1371.)
Prerequisite: Instructor approval. Introduction to common reproductive management techniques of equine reproduction including natural and artificial insemination. Emphasis on practical reproductive techniques in laboratory settings. The student will demonstrate knowledge of mare and stallion reproductive anatomy and physiology; perform handling techniques for and management of brood mares and stallions; and implement artificial insemination and natural breeding programs. Laboratory fee. (2 Lec., 3 Lab.)

VTHT 1341 Anesthesia and Surgical Assistance (3)
(This is a WECM course number. Former course prefix/number VETT 2470.)
Prerequisites: Introduction to Veterinary Technology, Veterinary Pharmacology, and Advanced Veterinary Anatomy and Physiology In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. The student will identify instruments used in veterinary surgery; demonstrate operating room etiquette and the use of sterile technique; perform pre-anesthesia evaluation, administer and monitor anesthesia, and provide post-anesthesia care; recognize and respond appropriately to anesthetic emergencies; and assist with routine surgical and obstetrical procedures. Laboratory fee. (2 Lec., 4 Lab.)
VTHT 1345 Veterinary Radiology (3)
(This is a WECM course number. Former course prefix/number VETT 2371.)
Prerequisite: Anesthesia and Surgical Assistance. Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. The student will implement and follow recommended safety procedures; prepare and use technique charts; take and process diagnostic radiographs using stationary and portable X-ray machines; properly care for radiographic equipment; and label, file, and store radiographs. Laboratory fee. (2 Lec., 3 Lab.)

VTHT 1349 Veterinary Pharmacology (3)
(This is a WECM course number. Former course prefix/number VETT 1370.)
Prerequisite: Mathematics and Advanced Veterinary Anatomy and Physiology. Fundamentals of pharmacology including recognition, calculation, labeling, packaging, and administration of common veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to these agents. The student will recognize general types and groups of drugs; prepare, label, package, and dispense pharmaceuticals in an ethical/legal manner; calculate dosages using proper weights, units, and measures; explain and use appropriate routes and methods of drug administration; and differentiate between normal and abnormal responses to medication. Laboratory fee. (3 Lec., 1 Lab.)

VTHT 1401 Introduction to Veterinary Technology (4)
(This is a WECM course number. Former course prefix/number VETT 1470.)
Prerequisite: Program Acceptance. Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of domestic animals, and ethical and professional requirements. The student will demonstrate basic restraint, medication, and treatment techniques for domestic animals; identify breeds of domestic animals; and specify the distinct job responsibilities of a veterinary technician in a modern veterinary practice including physical exams, basic care, feeding, sanitation, public and/or client relations, and ethical and legal issues. Laboratory fee. (3 Lec., 3 Lab.)

VTHT 1413 Veterinary Anatomy and Physiology (4)
(This is a WECM course number. Former course prefix/number VETT 1472.)
Gross anatomy of domestic animals including physiological explanations of how each organ system functions. The student will identify and describe the major anatomical and physiological systems of domestic animals and apply this knowledge to common disease processes. Laboratory fee. (3 Lec., 3 Lab.)

VTHT 2201 Canine and Feline Clinical Management (2)
(This is a WECM course number. Former course prefix/number VETT 1171.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canines and felines encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of canines and felines in a clinical setting; and recognize common disease pathophysiology. Laboratory fee. (2 Lec., 1 Lab.)

VTHT 2205 Equine Clinical Management (2)
(This is a WECM course number. Former course prefix/number VETT 2170.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of equines in a clinical setting. Review of common diseases of equines encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; and implement knowledge of nutrition, behavior, and reproduction of equines in a clinical setting. Laboratory fee. (2 Lec., 1 Lab.)

VTHT 2209 Food Animal Clinical Management (2)
(This is a WECM course number. Former course prefix/number VETT 2171.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of food producing animals in a clinical setting. Review of common diseases of food producing animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of food producing animals in a clinical setting; and recognize common disease pathophysiology. Laboratory fee. (2 Lec., 1 Lab.)
VTHT 2213 Lab Animal Clinical Management (2)
(This is a WECM course number. Former course prefix/number VETT 2372.)
Prerequisite: Introduction to Veterinary Technology. Survey of feeding, common management practices, and care of laboratory animals in a clinical setting. Review of common diseases of laboratory animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of laboratory animals in a clinical setting; and recognize common disease pathophysiology. Laboratory fee. (2 Lec., 1 Lab.)

VTHT 2217 Exotic Animal Clinical Management (2)
(This is a WECM course number. Former course prefix/number VETT 2374.)
Prerequisite: Instructor Approval. Survey of feeding, common management practices, and care of exotic animals in a clinical or zoological setting. Review of common diseases of exotic animals encountered in the practice of veterinary medicine. The student will apply appropriate sanitation and disease prevention techniques; utilize appropriate medication procedures; implement knowledge of nutrition, reproduction, and behavior of exotic animals in a clinical setting; and recognize common disease pathophysiology. Laboratory fee. (2 Lec., 1 Lab.)

VTHT 2321 Veterinary Parasitology (3)
(This is a WECM course number.)
Prerequisite: Program acceptance. Study of parasites common to domestic animals including zoonotic diseases. The student will identify internal and external parasites and parasites of public health importance; and apply knowledge of basic life cycles to the study of parasites. Laboratory fee. (2 Lec., 3 Lab.)

VTHT 2323 Veterinary Clinical Pathology I (3)
(This is a WECM course number. Former course prefix/number VETT 1570.)
Prerequisite: Program acceptance. In-depth study of hematology and related chemistries with emphasis on lab procedures. The student will perform complete blood counts (CBC's); recognize abnormal blood conditions; perform common blood chemistries; demonstrate appropriate use of diagnostic equipment; and perform pre-anesthesia evaluation. Laboratory fee. (2 Lec., 4 Lab.)

VTHT 2331 Veterinary Clinical Pathology II (3)
(This is a WECM course number. Former course prefix/number VETT 2570.)
Prerequisite: Program acceptance and Advanced Veterinary Anatomy and Physiology. In-depth study of urinalysis and cytology. Survey of microbiological techniques. Emphasis on laboratory procedures. The student will perform urinalysis, cytological, and basic microbiological techniques; review abnormal blood conditions and common blood chemistries; demonstrate appropriate use of diagnostic equipment; and perform pre-anesthesia evaluation. Laboratory fee. (2 Lec., 4 Lab.)

VTHT 2380 Cooperative Education - Veterinarian Assistant/Animal Health Technician (3)
(This is a WECM course number. Former course prefix/number VETT 7371.)
Prerequisite: Instructor approval, Anesthesia and Surgical Assistance, and Veterinary Clinical Pathology II. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the particular occupation and the business/industry; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, communicating in the applicable technical language of the occupation and the business or industry. Laboratory fee. (1 Lec., 15 Ext.)

VTHT 2425 Large Animal Assisting Techniques (4)
(This is a WECM course number. Former course prefix/number VETT 2471.)
Prerequisite: Introduction to Veterinary Technology, Veterinary Pharmacology, and Advanced Veterinary Anatomy and Physiology. Study of basic restraint and proper management, treatment, and medication techniques for farm animals. The student will perform basic restraint of farm animals; demonstrate proper treatment and medication techniques; and identify common diseases of and management techniques for farm animals. Laboratory fee. (3 Lec., 4 Lab.)
VTHT 2435 Advanced Veterinary Anatomy and Physiology (4)
(This is a WECM course number. Former course prefix/number VETT 2473.)
Prerequisite: Veterinary Anatomy and Physiology.
Continuation of anatomy of domestic animals including physiological explanations of the functioning of each system. The student will identify and describe each anatomical and physiological system of domestic animals and apply this knowledge to common disease processes. Laboratory fee. (3 Lec., 3 Lab.)

VTHT 2439 Veterinary Nursing Care (4)
(This is a WECM course number. Former course prefix/number VETT 2472.)
Prerequisite: VTHT 2425, VTHT 1341, and VTHT 2331.
Capstone course requiring integration of course work in the field of veterinary technology. The student will apply surgical and anesthesia principles with special attention to pharmacological care; and demonstrate competencies expected of an entry level registered veterinary technician. Laboratory fee. (3 Lec., 3 Lab.)

VIDEO TECHNOLOGY

FLMC 1331 Computers in Video Production I (3)
(This is a WECM course number. Former course prefix/number RFTV 2374.)
Introduction to the applications of computers to video production. Topics include the design of PC computer graphic workstations and development of a rationale for selecting software, hardware, and peripherals. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1301 Introduction to Multimedia (3)
(This is a WECM course number. Former course prefix/number RFTV 1373.)
A survey of the theories, elements, and hardware/software components of multimedia. Topics include digital image editing, digital sound and video editing, animation, web page development, and interactive presentations. Emphasis on conceptualizing and producing effective multimedia presentations. Laboratory fee. (2 Lec., 3 Lab.)

IMED 1305 Multimedia Authoring I (3)
(This is a WECM course number. Former course prefix/number RFTV 2377.)
Instruction in multimedia development with an icon based development tool. Topics include interactivity, branching, navigation, and interface/information design using industry standard authoring software. Laboratory fee. (2 Lec., 3 Lab.)

IMED 1451 Digital Video (4)
(This is a WECM course number. Former course prefix/number RFTV 1472.)
Skill development in producing and editing video and sound for multimedia productions. Emphasis on the capture, editing, and outputting of video using a desktop digital video workstation. Laboratory fee. (3 Lec., 3 Lab.)

IMED 2311 Portfolio Development (3)
(This is a WECM course number. Former course prefix/number RFTV 2378.)
Emphasis on preparation and enhancement of portfolio to meet professional standards, professional organizations, presentation skills, and job-seeking techniques. Laboratory fee. (2 Lec., 4 Lab.)

PHTC 1349 Photo Digital Imaging I (3)
(This is a WECM course number. Former course prefix/number RFTV 2378.)
Continued skill development in the use of the computer for retouching, copying, photographic restoration, color correction, data importation, composite imaging, and background dropout and replacement. Laboratory fee. (2 Lec., 4 Lab.)

RTVB 1305 Introduction to Television Technology (3)
(This is a WECM course number. Former course prefix/number RFTV 1370.)
Instruction in the selection and application of production supplies and equipment in shooting situations. Introduction to digital and analog signal concepts and their use in production and the theory, application, and internal operation of television production equipment. Laboratory fee. (2 Lec., 2 Lab.)

RTVB 1317 Survey of Electronic Media (3)
(This is a WECM course number. Former course prefix/number RFTV 2376.)
A survey of the broadcast and cable industry. Topics include the history of the broadcast and cable industries, operation of radio and TV stations, cable facilities, programming practices of radio, and Federal Communication Commission (FCC) organization and regulatory activity. Also includes career opportunities in broadcasting and cable and the impact of the new media. (3 Lec.)

RTVB 1329 Writing for Electronic Media (3)
(This is a WECM course number. Former course prefix/number RFTV 2373.)
An introduction to the writing of commercials, public service announcements, promos, news documentaries, and other broadcast and film materials. Emphasis on the format and style of each type of writing and development of a professional writing style. (3 Lec.)
RTVB 1345 Broadcast Engineering (3)  
(This is a WECM course number. Former course prefix/number RFTV 2370.)  
Instruction in the basics of engineering video productions including the basic alignment/adjustment of cameras, test equipment, storage devices, and other studio equipment. Also includes basic system design and construction and digital standards for broadcast, cable, satellite, and network distribution. Laboratory fee. (2 Lec., 3 Lab.)

RTVB 2382 Cooperative Education - Radio and Television Broadcasting Technology/Technician (3)  
(This is a WECM course number. Former course prefix/number RFTV 7371.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (1 Lec., 15 Ext.)

RTVB 2383 Cooperative Education - Radio and Television Broadcasting Technology/Technician (3)  
(This is a WECM course number. Former course prefix/number RFTV 7471.)  
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Laboratory fee. (1 Lec., 20 Ext.)

RTVB 1371 Television Lighting (3)  
(This is a local need course number. Former course prefix/number RFTV 1371.)  
This course introduces students to the theory and application of lighting for television production. Topics include basic lighting equipment for studio and location productions and the application of lighting to a variety of production environments. Choices of color, angle, intensity, distribution, and the proper use of lighting control scrims, screens, and gels are emphasized. Laboratory fee. (2 Lec., 3 Lab.)

RTVB 1391 Special Topics in Radio and Television Broadcasting Technology/Technician (3)  
(This is a WECM course number. Former course prefix/number RFTV 2379.)  
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 3 Lab.)

RTVB 1409 Audio/Radio Production I (4)  
(This is a WECM course number. Former course prefix/number RFTV 1372.)  
An introduction the concepts and techniques of sound production including basic recording, mixing, and editing techniques. Laboratory fee. (2 Lec., 3 Lab.)

RTVB 1321 TV Field Production (3)  
(This is a WECM course number. Former course prefix/number RFTV 1471.)  
A study of the pre-production, production, and post-production process involved in field television production. Topics include field camera setup and operation, field audio, television directing, and in-camera or basic continuity editing with an emphasis on underlying principles of video technology. Laboratory Fee (2 Lec., 4 Lab.)

RTVB 2335 TV Production (3)  
(This is a WECM course number. Former course prefix/number RFTV 1470.)  
A study of the pre-production, production, and post-production process involved in single and multiple-camera studio or field television production. Advanced instruction in camera operation, lighting, audio, television directing, and single and multiple-source editing with emphasis on underlying principles of video technology. Laboratory fee. (2 Lec., 4 Lab.)

RTVB 2345 Advanced Broadcast Engineering (3)  
(This is a WECM course number. Former course prefix/number RFTV 2372.)  
Continuation of Broadcast Engineering with emphasis on detailed application of problem solving, troubleshooting, and adjustments associated with video system components. Also includes analysis of specific broadcast, cable, satellite, and network issues. Laboratory fee. (2 Lec., 4 Lab.)
RTVB 2347 Management and Operation of Electronic Media (3)
(This is a WECM course number. Former course prefix/number RFTV 2371.)
Examination of the operation of production companies, broadcast stations, and cable companies from the management and business perspectives. Topics include departments in the organizations as they relate to work tasks and contributions made to the economic success of the business operation, programming and promotion strategies which enhance audience response, budgets, and marketing. (3 Lec.)

RTVB 2437 TV Production Workshop I (4)
(This is a WECM course number. Former course prefix/number RFTV 2470.)
Study of advance application and design of video productions in location or studio shoots with real deadlines and quality control restrictions. Laboratory fee. (2 Lec., 6 Lab.)

RTVB 2455 TV Production Workshop II (4)
(This is a WECM course number. Former course prefix/number RFTV 2471.)
Production of a variety of final projects demonstrating mastery of field and/or studio competence. Development of a video portfolio to present in job interviews, perfection of production techniques, and development of an individual production style. Laboratory fee. (2 Lec., 6 Lab.)

VISUAL COMMUNICATIONS

ARTT 1101 Conceptual Figure Drawing (1)
(This is a WECM course number. Former course prefix/number ARTS 2323)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Introduction to the techniques of drawing the human figure with emphasis on gesture and contour technique. Topics include structure of the human form in relation to drawing body proportions; bone and muscle structure of the human form and the bone and muscle components of human hands and other appendages. This class must be taken concurrently with ARTT 1201. Laboratory fee. (4 Lab.)

ARTT 1149 Drawing Techniques (1)
(This is a WECM course number. Former course prefix/number VCOM 2371)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Instruction in production of creative illustrations with techniques using special surfaces and tools for black and white artwork for reproduction. Projects in ink drawings using coquille board, India ink, technical drawing pens, pen and ink, drybrush, bristol board, scratch board, and litho pencil. This class must be taken concurrently with ARTT 1149. (2 Lec.)

ARTT 1151 Interpretive Figure Drawing (1)
(This is a WECM course number. Former course prefix/number ARTS 2324)
Prerequisites: Visual Communications Core Curriculum and ARTT 1101/1201, or demonstrated competence approved by the instructor. Study of the correct proportions of the human figure and its graphic interpretation. Includes basic human figure and head construction using standard division and proportion techniques. Topics include profile view, three-quarter view, and frontal view of the human head, male or female; head division and proportion techniques for eye, nose, mouth, and ear placement; and the eight head standing figures drawing technique. This class must be taken concurrently with ARTT 1251. Laboratory fee. (4 Lab.)

ARTT 1201 Conceptual Figure Drawing (2)
(This is a WECM course number. Former course prefix/number ARTS 2323)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Introduction to the techniques of drawing the human figure with emphasis on gesture and contour technique. Topics include structure of the human form in relation to drawing body proportions; bone and muscle structure of the human form and the bone and muscle components of human hands and other appendages. This class must be taken concurrently with ARTT 1101. (2 Lec.)

ARTT 1249 Drawing Techniques (2)
(This is a WECM course number. Former course prefix/number VCOM 2371)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Instruction in production of creative illustrations with techniques using special surfaces and tools for black and white artwork for reproduction. Projects in ink drawings using coquille board, India ink, technical drawing pens, pen and ink, drybrush, bristol board, scratch board, and litho pencil. This class must be taken concurrently with ARTT 1149. (2 Lec.)
ARTT 1251 Interpretive Figure Drawing (2)
(This is a WECM course number. Former course prefix/number ARTS 2324)
Prerequisites: Visual Communications Core Curriculum and ARTT 1101/1201, or demonstrated competence approved by the instructor. Study of the correct proportions of the human figure and its graphic interpretation. Includes basic human figure and head construction using standard division and proportion techniques. Topics include profile view, three-quarter view, and frontal view of the human head, male or female; head division and proportion techniques for eye, nose, mouth, and ear placement; and the eight head standing figures drawing technique. This class must be taken concurrently with ARTT 1151. (2 Lec.)

ARTC 1301 Basic Animation (3)
(This is a WECM course number. Former course prefix/number VCOM 2384)
Prerequisites: Visual Communications Core Curriculum, or demonstrated competence approved by the instructor. Examination of concepts, characters, and storyboards for basic animation production. Emphasis on creating movement and expression utilizing traditional or electronically generated image sequences. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 1305 Basic Graphic Design (3)
(This is a WECM course number. Former course prefix/number VCOM 1373)
A study of two-dimensional (2-D) design with emphasis on the visual communication design process. Topics include basic terminology and graphic design principles. (2 Lec., 4 Lab.)

ARTC 1309 Basic Illustration (3)
(This is a WECM course number. Former course prefix/number VCOM 1377)
Introduction to drawing techniques, skills, and concepts using various black and white media. Emphasis on perspective construction of the human figure and principles of shading as they pertain to the commercial illustration industry. (2 Lec., 4 Lab.)

ARTC 1317 Design Communication I (3)
(This is a WECM course number. Former course prefix/number VCOM 1375)
Prerequisites: ARTC 1305, 2305, and 2311, or demonstrated competence approved by the instructor. Study of design development relating to graphic design terminology, tools and media, and layout and design concepts. Topics include integration of type, images and other design elements, and developing computer skills in industry standard computer programs. (2 Lec., 4 Lab.)

ARTC 1345 3-D Modeling and Rendering (3)
(This is a WECM course number. Former course prefix/number VCOM 2381)
Prerequisites: Visual Communications Core Curriculum, or demonstrated competence approved by the instructor. A studio course in the theory and technique of three-dimensional (3-D) modeling utilizing appropriate software. Topics include the creation and modification of 3-D geometric shapes; and variety of rendering techniques; and use of camera light sources, texture, and surface mapping. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 1353 Computer Illustration (3)
(This is a WECM course number. Former course prefix/number ARTS 2324)
Prerequisites: Visual Communications Core Curriculum, or demonstrated competence approved by the instructor. Exploration of computer programs with applications to illustration and photo manipulation and file management for reproduction. Emphasis on concept development in print and digital delivery. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 1371 Advertising Copywriting (3)
(This is a local need course number. Former course prefix/number VCOM 1374)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Creative writing techniques for advertising are explored in this class. The student will develop and write headlines and copy for advertising, public relations material, proposals, and business communications. Emphasis is placed on creative aspects of writing and concept development toward advertising and marketing aims. (3 Lec.)

ARTC 1391 Special Topics In Graphic Design, Commercial Art and Illustration (3)
(This is a WECM course number. Former course prefix/number VCOM 2375)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course may be repeated for credit. Laboratory fee. (2 Lec., 4 Lab.)
ARTC 2305 Digital Painting and Imaging (3)
(This is a WECM course number. Former course prefix/number VCOM 1371)
General principles of digital image processing and electronic painting. Emphasis on bitmapped- or raster-based image making and the creative aspects of electronic illustration for commercial and fine art applications. This introductory course provides the skills necessary for creating art work, design and illustration with a Macintosh computer. Instruction is centered on natural media paint applications and the Macintosh operating system. Prior computer experience is not necessary. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 2309 Electronic Prepress (3)
(This is a WECM course number. Former course prefix/number VCOM 2386)
Prerequisites: Visual Communications Core Curriculum, GRPH 1322 and 2341, or demonstrated competence approved by the instructor. Theory and techniques for pre-press preparation using industry standard software for final file output. Topics include the procedures and problems involved in computer file preparation ranging from trapping, color separations, and resolutions to printing basics and service bureaus. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 2311 History of Communication Graphics (3)
(This is a WECM course number. Former course prefix/number VCOM 1372)
Prerequisite: Credit or concurrent enrollment in ENGL 1301, or demonstrated competence approved by the instructor. Survey of the evolution of graphic arts as it relates to the history of art. Topics include formal, stylistic, social, political, economic, and historical aspects. Emphasis on the art movement, schools of thought, individuals, and technology as they interrelate with graphic arts. (3 Lec.)

ARTC 2331 Illustration Concepts (3)
(This is a WECM course number. Former course prefix/number VCOM 2376)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. Advanced study of different painting media such as digital and traditional tools. Emphasis on conceptualization and composition as they relate to "real world" assignments. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 2347 Design Communication II (3)
(This is a WECM course number. Former course prefix/number VCOM 2373)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. An advanced study of design, development, and art direction. Emphasis on form and content through the selection, creation, and integration of typographic, photographic, illustrative, and design elements. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 2371 Publication Design (3)
(This is a local need course number. Former course prefix/number VCOM 2385)
Prerequisites: Visual Communications Core Curriculum and GRPH 1322, or demonstrated competence approved by the instructor. This course continues the development of skills and knowledge of desktop publishing software. Emphasis is on the production of multi-page documents, such as books and pamphlets, and creating and maintaining visual continuity throughout the document. The Macintosh operating system and related software applications are used. Laboratory fee. (2 Lec., 4 Lab.)

ARTC 2378 Design Studio Practices (3)
(This is a local need course number. Former course prefix/number VCOM 2471)
Prerequisites: Visual Communications Core Curriculum and demonstrated competence approved by the instructor. The student serves as a designer, illustrator, computer graphics artist and/or art director in the Brookhaven College Visual Communications Design Studio. This course provides the student study and application in design studio practices. A portfolio is required for approval prior to registration. (1 Lec., 6 Lab.)

ARTC 2379 Cooperative Education (3)
(This is a local need course number. Former course prefix/number VCOM 7371)
Prerequisites: Visual Communications Core Curriculum and demonstrated competence approved by the instructor. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 15 Lab.)
ARTC 2479 Cooperative Education (4)
(This is a local need course number. Former course prefix/number VCOM 7471)
Prerequisites: Visual Communications Core Curriculum and demonstrated competence approved by the instructor. Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 21 Lab.)

GRPH 1322 Electronic Publishing I (3)
(This is a WECM course number. Former course prefix/number VCOM 2374)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. An introduction to computer layout and design using major components of electronic publishing including text, graphics, and page layout and design using a computer. Introduction to the basic concepts and terminology associated with typography and page layout. Laboratory fee. (2 Lec., 4 Lab.)

GRPH 1325 Digital Imaging I (3)
(This is a WECM course number. Former course prefix/number VCOM 2380)
Prerequisites: Visual Communications Core Curriculum or demonstrated competence approved by the instructor. An introduction to digital imaging on the computer using image editing and/or image creation software. Topics include: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Laboratory fee. (2 Lec., 4 Lab.)

GRPH 1359 Object Oriented Computer Graphics (3)
(This is a WECM course number. Former course prefix/number VCOM 1376)
Prerequisites: ARTC 1305, 2305, and 2311, or demonstrated competence approved by the instructor. Mastery of the tools and transformation options of an industry standard draw program to create complex illustrations and follow them through to the color output stage. Mastery in the use of basic elements of good layout and design principles and use of the capabilities specific to vector (object oriented) drawing software to manipulate both text and graphics with emphasis on the use of bezier curves. Acquisition of images via scanning and the creative use of clip art is included. Laboratory fee. (2 Lec., 4 Lab.)

GRPH 2341 Electronic Publishing III (3)
(This is a WECM course number. Former course prefix/number VCOM 2378)
Prerequisites: Visual Communications Core Curriculum, credit or concurrent enrollment in GRPH 1322, or demonstrated competence approved by the instructor. Advanced concepts in electronic publishing using an industry standard page layout software package. In-depth color separations, trapping and advanced techniques for controlling type and graphics. Overview of color schemes, software additions (plug-ins, filters, utilities), and preparation of files for printing. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1345 Interactive Multimedia I (3)
(This is a WECM course number. Former course prefix/number VCOM 2379)
Prerequisites: Visual Communications Core Curriculum, or demonstrated competence approved by the instructor. Exploration of the use of graphics and sound to create time-based interactive multimedia animations using industry standard authoring software. Laboratory fee. (2 Lec., 4 Lab.)

IMED 1316 Web Page Design I (3)
(This is a WECM course number. Former course prefix/number VCOM 1378)
Prerequisites: ARTC 1305, 2305, and 2311, or demonstrated competence approved by the instructor. Instruction in Internet web page design and related graphic design issues including mark-up languages, web sites, Internet access software, and interactive topics. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2345 Interactive Multimedia II (3)
(This is a WECM course number. Former course prefix/number VCOM 2383)
Prerequisites: Visual Communications Core Curriculum and IMED 1345, or demonstrated competence approved by the instructor. Instruction in the use of scripting language to create time-based interactive multimedia projects. Topics include building a user interface, writing script, using commands and functions, testing, and debugging. Laboratory fee. (2 Lec., 4 Lab.)

IMED 2311 Portfolio Development (3)
(This is a WECM course number. Former course prefix/number VCOM 2377)
Prerequisites: Visual Communications Core Curriculum and demonstrated competence approved by the instructor. This class should be taken in the final semester of the program. Emphasis on preparation and enhancement of portfolio to meet professional standards, professional organizations, presentation skills, and job-seeking techniques. Laboratory fee. (2 Lec., 4 Lab.)
IMED 2315 Web Page Design II (3)
(This is a WECM course number. Former course prefix/number VCOM 2370)
Prerequisites: Visual Communications Core Curriculum, or demonstrated competence approved by the instructor. A study of hypertext mark-up language (HTML) and interesting layout techniques for creating and engaging well designed web pages. Emphasis on identifying the target audience and producing a web site according to physical and technical limitations, cultural appearance, and legal issues. Laboratory fee. (2 Lec., 4 Lab.)

PHTC 1349 Photo Digital Imaging I (3)
(This is a WECM course number. Former course prefix/number VCOM 2382)
Prerequisites: Visual Communications Core Curriculum, or demonstrated competence approved by the instructor. Instruction in the computer as an electronic darkroom. Topics include color and gray scale images and image conversion and presentation. This course provides instruction in use of digital cameras to capture images for use in illustration, design, publications and advertising. Laboratory fee. (2 Lec., 4 Lab.)

VOCATIONAL NURSING

VNSG 1163 Clinical-Practical Nurse (LPN Training) (1)
(This is a WECM course number. Former course prefix/number VNUR 1572)
Prerequisite: VNSG 1406. A method of instruction providing detailed education, training, and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Courses may be repeated if topics and learning outcomes vary. Focus is on the care of the maternal/newborn client. (3 Ext.)

VNSG 1227 Essentials of Medication Administration (2)
(This is a WECM course number. Former course prefix/number VNUR 1271)
General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement. (2 Lec.)

VNSG 1263 Clinical-Practical Nurse (LPN Training) (2)
(This is a WECM course number. Former course prefix/number VNUR 1573)
Prerequisite: VNSG 1334. A method of instruction providing detailed education, training, and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Courses may be repeated if topics and learning outcomes vary. Focus is on the care of pediatric clients. A clinical rotation focused on transition to the role of the vocational nurse is also included. (6 Ext.)

VNSG 1304 Foundations of Nursing (3)
(This is a WECM course number. Former course prefix/number VNUR 1471)
Introduction to the nursing profession including history, standards of practice, legal and ethical issues, and role of the vocational nurse. Topics include mental health, therapeutic communication, cultural and spiritual diversity, nursing process, and holistic awareness. (3 Lec.)

VNSG 1323 Basic Nursing Skills (3)
(This is a WECM course number. Former course prefix/number VNUR 1271)
Mastery of entry level nursing skills and competencies for a variety of health care settings. Utilization of the nursing process as the foundation of all nursing interventions. Laboratory fee. (2 Lec., 2 Lab.)

VNSG 1334 Pediatrics (3)
(This is a WECM course number. Former course prefix/number VNUR 1573)
Prerequisite: Completion of all Level III Vocational Nursing courses. Study of childhood diseases and childcare from infancy through adolescence. Focus on the care of the well and the ill child utilizing the nursing process. (3 Lec.)
VNSG 1360 Clinical-Practical Nurse (LPN Training) (3)
(This is a WECM course number. Former course prefix/number VNUR 1471.)
Prerequisite: VNSG 1227, VNSG 1332. Co-requisite: VNSG 1509. A method of instruction providing detailed education, training, and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Courses may be repeated if topics and learning outcomes vary. Includes independent study activity, focused on care of the elderly in the community. (9 Ext.)

VNSG 1406 Maternal/Newborn Nursing (4)
(VNUR (This is a WECM course number. Former course prefix/number 1572.)
Prerequisite: All Level II Vocational Nursing courses. A study of the biological, psychological and sociological concepts applicable to basic needs of the family including childbearing and neonatal care. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the purpureum. Laboratory fee. (3 Lec., 2 Lab.)

VNSG 1509 Nursing in Health and Illness II (5)
(This is a WECM course number. Former course prefix/number VNUR 1371.)
Introduction to common health problems of the adult requiring medical and surgical interventions. (5 Lec.)

VNSG 1510 Nursing in Health and Illness III (5)
(This is a WECM course number. Former course prefix/number VNUR 1570.)
Prerequisite: All Level I Vocational Nursing Courses. Co-requisite: VNSG 2460. Continuation of Nursing in Health and Illness II. Further study of common medical-surgical health problems of the adult including concepts of mental illness. Incorporates knowledge necessary to make the transition from student to graduate vocational nurse. Laboratory fee. (4 Lec., 3 Lab.)

VNSG 2460 Clinical-Practical Nurse (LPN Training) (4)
(This is a WECM course number. Former course prefix/number VNUR 1571.)
Co-requisite: VNSG 1510. A method of instruction providing detailed education, training, and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Courses may be repeated if topics and learning outcomes vary. Focus is on the care of patients with more complex medical-surgical health problems. (24 Ext.)

WELDING

WLDG 1191 Special Topics in Welder/Welding Technologist (1)
(This is a WECM course number. Former course prefix/number WLD 100.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 1 Lab.)

WLDG 1221 Introduction to Welding Fundamental I (2)
(This is a WECM course number. Former course prefix/number WLD 113)
An introduction to the fundamentals of equipment used in oxyacetylene and arc welding, including welding and cutting safety, basic oxyacetylene welding and cutting, basic arc welding processes and basic metallurgy. Laboratory fee. (1 Lec., 3 Lab.)

WLDG 1222 Introduction to Welding Fundamental II (2)
(This is a WECM course number. Former course prefix/number WLD 114)
A continuation of Welding 1221, an introduction to the fundamentals of equipment used in oxyacetylene and arc welding, including welding and cutting safety, basic oxyacetylene welding and cutting, basic arc welding processes and basic metallurgy. Laboratory fee. (1 Lec., 3 Lab.)
WLDG 1225 Introduction to Oxy-Fuel Welding and Cutting (2)
(This is a WECM course number.)
An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies. Laboratory fee. (1 Lec., 3 Lab.)

WLDG 1230 Introduction to Gas Metal Arc (MIG) Welding (2)
(This is a WECM course number.)
A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs. Laboratory fee. (1 Lec., 3 Lab.)

WLDG 1234 Introduction to Gas Tungsten Arc (TIG) Welding (2)
(This is a WECM course number.)
An introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs. Laboratory fee. (1 Lec., 3 Lab.)

WLDG 1291 Special Topics in Welder/Welding Technologist (2)
(This is a WECM course number. Former course prefix/number WELD 2274.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 2 Lab.)

WLDG 1313 Introduction to Blueprint Reading for Welders (3)
(This is a WECM course number. Former course prefix/number WELD 1371.)
A study of industrial blueprints. Emphasis placed on terminology, symbols, graphic description, and welding processes, including systems of measurement and industry standards. Interpretation of plans and drawings used by industry. Laboratory fee. (2 Lec., 4 Lab.) (3 Lec., 1 Lab.)

WLDG 1337 Introduction to Metallurgy (3)
(This is a WECM course number. Former course prefix/number WELD 2370.)
A study of ferrous and nonferrous metals from the ore to the finished product. Emphasis on metal alloys, heat treating, hard surfacing, welding techniques, forging, foundry processes, and mechanical properties of metal including hardness, machinability, and ductility. Laboratory fee. (1 Lec., 6 Lab.)

WLDG 1371 Welding Standards (3)
(This is a local need course number.)
Topics will address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 6 Lab.)

WLDG 1381 Cooperative Education-Welder/Welding Technologist (3)
(This is a WECM course number. Former course prefix/number WLD 104.)
Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. (1 Lec., 20 Lab.)

WLDG 1391 Special Topics in Welder/Welding Technologist (3)
(This is a WECM course number. Former course prefix/number WELD 2373.)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (1 Lec., 6 Lab.) (2 Lec., 3 Lab.)

WLDG 1425 Introduction to Oxy-Fuel and Cutting (4)
(This is a WECM course number. Former course prefix/number WELD 1270 or WELD 1271.)
An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW) (4)
(This is a WECM course number. Former course prefix/number WELD 1272 or WELD 1273.)
An introduction to shielded metal arc welding process. Emphasis placed on power sources, electrode selection, oxy-fuel cutting, and various joint designs. Instruction provided in SMAW fillet welds in various positions. Laboratory fee. (2 Lec., 6 Lab.)
WLDG 1430 Introduction to Gas Metal Arc (MIG) Welding (4)
(This is a WECM course number. Former course prefix/number WELD 2272 or WELD 2273.)
A study of the principles of gas metal arc welding, setup and use of GMAW equipment, and safe use of tools/equipment. Instruction in various joint designs. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 1434 Introduction to Gas Tungsten Arc (TIG) Welding (4)
(This is a WECM course number. Former course prefix/number WELD 2270.)
An introduction to the principles of gas tungsten arc welding (GTAW), setup/use of GTAW equipment, and safe use of tools and equipment. Welding instruction in various positions on joint designs. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 1457 Intermediate Shielded Metal Arc Welding (SMAW) (4)
(This is a WECM course number. Former course prefix/number WELD 1470.)
A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 1471 Welding Qualifications (4)
(This is a local need course number.)
Topics will address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 1491 Special Topics in Welder/Welding Technologist (4)
(This is a WECM course number. Former course prefix/number WLD 111)
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 2206 Intermediate Pipe Welding I (2)
(This is a WECM course number. Former course prefix/number WLD 207.)
A comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds 1G, 2G 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices. Laboratory fee. (1 Lec., 3 Lab.)

WLDG 2207 Intermediate Pipe Welding II (2)
(This is a WECM course number. Former course prefix/number WLD 208.)
A continuation of Welding 2206, a comprehensive course on the welding of pipe using the shielded metal arc welding (SMAW) process. Position of welds 1G, 2G 5G, and 6G using various electrodes. Topics covered include electrode selection, equipment setup, and safe shop practices. Laboratory fee. (1 Lec., 3 Lab.)

WLDG 2331 Advanced Blueprint Interpretation and Cost Analysis (3)
(This is a WECM course number. Former course prefix/number WELD 2372.)
A continuation of the Blueprint for Welders course. Emphasis placed on inspection, cost analysis, and estimating, including instruction in basic drafting skills. Laboratory fee. (2 Lec., 4 Lab.)

WLDG 2411 Preparation for Welding Inspector Certification (4)
(This is a WECM course number. Former course prefix/number WELD 1472.)
Preparation for students for certification as welding inspectors, including accepted testing requirements and procedures, measurement systems, duties and responsibilities of inspectors, destructive and nondestructive testing, quality assurance/quality control, welding codes and blueprints, procedures, and case studies. An overview of welding tools and equipment, metallurgy, chemistry, and joint design. Laboratory fee. (3 Lec., 4 Lab.)

WLDG 2413 Welding Using Multiple Processes (4)
(This is a WECM course number. Former course prefix/number WLD 202.)
Instruction using layout tools and blueprint reading with demonstration and guided practices with some of the following welding processes: oxy-fuel gas cutting and welding, shield metal arc welding, gas metal arc welding, flux-cored arc welding, gas tungsten arc welding, or any other approved welding process. Laboratory fee. (2 Lec., 6 Lab.)
WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) (4)
(This is a WECM course number. Former course prefix/number WELD 1471.)
Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 2447 Advanced Gas Metal Arc (MIG) Welding (4)
(This is a WECM course number. Former course prefix/number WELD 2471.)
Advanced topics in GMAW welding, including welding in various positions and directions. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 2451 Advanced Gas Tungsten Arc (TIG) Welding (4)
(This is a WECM course number. Former course prefix/number WELD 2470.)
Advanced topics in GTAW welding, including welding in various positions and directions. Laboratory fee. (2 Lec., 6 Lab.)

WLDG 2455 Advanced Welding Metallurgy (4)
(This is a WECM course number. Former course prefix/number WELD 2371.)
A study of metallurgy as it applies to welding, including structure, identification, and testing of metals; temperature changes and their effect on welded metals; properties of metals, and factors affecting weldability of ferrous and nonferrous metals. Laboratory fee. (2 Lec., 4 Lab.)
The R. Jan LeCroy Center for Educational Telecommunications of Dallas Community College District, named for former DCCCD Chancellor R. Jan LeCroy, is a national leader in educational telecommunications. In addition to delivering an outstanding distance education program, which enrolls over 10,000 each year, the Center is recognized as a preeminent producer of distance education products. They have produced over 30 courses for national distribution. These courses have been leased to over 1,200 educational institutions, in all 50 states and over 40 countries, reporting over 1 million enrollments.

The Center is a major supplier of distance education courseware for the PBS Adult Learning Service. The LeCroy Center produces five of the PBS Adult Learning Service’s top courses. Since 1996, the Center has expanded course production to reflect the use of the Internet and a variety of multimedia tools, providing courseware, server space and technical platform maintenance to client colleges.

The DALLAS Distance Learning program is providing greater access to education locally and worldwide. DALLAS TeleCollege is the ‘virtual campus’ of the Dallas Community College District making delivery of flexible, cost-effective college courses available to anyone with Internet access.

DALLAS Distance Learning and DALLAS TeleCollege

Over 240,000 students have enrolled in DCCCD distance education courses since they began in 1972. Approximately 10,000 students enroll in the program each academic year. DALLAS Telecollege partners with Western Governors University (WGU), the Southern Regional Electronic Campus (SREC), the Community College Distance Learning Network (CCDLN) and the Virtual College of Texas (VCT).

The Associate of Arts and the Associate of Science degree may be earned in its entirety through DALLAS TeleCollege. From their homes or business sites, students access over 100 courses in a variety of ways, primarily on television, videotape or through the Internet. For specific courses and information, see the Distance Learning section of this catalog, a college class schedule or log on to http://telecollege.dcccd.edu.
Dallas College Network/DC-Net
The LeCroy Center uses cable and instructional Television Fixed Service (ITFS) channels to deliver live, interactive courses to specially equipped business and industry locations, in addition to the DCCCD locations. Featuring one-way video and two-way audio, interactive classes allow instructors to reach students at multiple locations and interact in a live format. The interactive television studios can be made available to business and industry for special presentations and programs.

DALLAS TeleLearning
Dallas TeleLearning is one of the largest producers of college-credit telecourses in North America. Experienced educators work with professional scriptwriters and television producers to create award-winning telecourses known for their academic excellence. Several of these telecourses are among the top ten in use by U.S. colleges, and account for approximately 40% of all telecourse enrollments nationally. In addition, the DALLAS TeleLearning produces online courses and course components, which are used by colleges and businesses worldwide.

Global Learning Network
DALLAS TeleLearning offers colleges and businesses the Global Learning Network (GLN), which allows institutions to deliver online training and instruction to individuals around the world.

Satellite and Production Services
Teleconference Downlinking and Uplinking - Teleconferences provide an effective way to participate in regional or national conferences without traveling to the conference site. They are effective in linking groups for in-depth training and interaction on a wide variety of topics. They can be downlinked from KU-band or C-band satellite transmissions and broadcast to locations throughout Dallas County, or uplinked to satellite connections transmitting information worldwide. Facilities are available to the campuses and business and community groups on a contract basis.

Teleconference Production - The LeCroy Center has complete facilities, including satellite uplink and downlink capabilities, a television production studio, two teaching studios, a microwave network, and experienced educational and technical personnel to produce and deliver live, interactive video teleconferences to downlink sites throughout the country.

STARLINK - STARLINK is a satellite-based teleconference training network and serves as a vital link in the educational telecommunications systems supporting Texas community colleges and technical institutes. As an agency of the Texas Association of Community Colleges, STARLINK’s primary mission is to help faculty, staff, and administrators keep their knowledge and skills current by producing teleconferences that address both broad educational issues and specific technical/vocational issues. STARLINK also works with businesses and state agencies in delivering training throughout the state.

DCCCD employees are encouraged to call with any questions about distance learning or visit the Center any time.
Training at work for Dallas™

At the Bill J. Priest Institute for Economic Development, we’re committed to excellence. It’s not just something we talk about. It’s how we do business. We’ve been serving the community since 1989, growing Dallas’ economy and helping its businesses improve their performance. That’s what success means to us. Our vision is to lead the way.

Our services at a glance
• Customized training for businesses
• Career training
• Job placement services
• Office space for entrepreneurs
• Business start-up assistance
• Small business assistance
• Assistance with accessing capital
• Assistance with obtaining patents
• International trade assistance
• Government procurement assistance
• Business research library
• Testing and assessment services

Directions
The Bill Priest Institute is located at 1402 Corinth Street, just south of downtown Dallas (Mapco 45V). For directions from your location, call 214/860-5809.

Parking
The Bill Priest Institute is located at 1402 Corinth Street. All parking at the Bill Priest Institute is free. Limited outdoor parking is available in the front of the building and on the East side of the building. You may enter the black iron gate and park in any available space. Or you may choose to use the parking garage located on the West side of the building. If the entrance gate is down on the garage, push the button and ask the security guard to let you in.
Assessment

What you don't know can hurt you. When your employees don't have adequate skills or the information they need to do their jobs, their performance and your profits suffer.

We have the answers. Our staff can help your company assess its unique needs and determine what training solutions will work best for you. Whether it's training your managers to make meetings more effective or giving line workers the technical skills they need to reduce cycle time and waste, we can help your company improve its business performance.

Other testing services include GED, correspondence testing, credit by exam, ESL assessment and various national certifications, licensing and board exams for professional groups.

Training

Workforce Development

Dallas' strong economy and low unemployment leave many area companies searching for qualified people to hire. Like never before, individuals have great opportunities to learn new job skills or change careers.

Every year, hundreds of adults come to the Bill Priest Institute for short-term, intensive vocational training.

In six months or less, they have the skills employers need. That's because we work with business leaders to develop training that prepares people to do the jobs in demand throughout the Metroplex.

Then, we help them find jobs using the skills they've learned. We work with area companies to understand

Preparing people with the career skills they need to be successful is an important part of the Institute's mission.
their personnel needs and strive to match our qualified trainees with appropriate positions.

The best part is that training is usually free to our trainees. Through a variety of grant sources – including WorkSource for Dallas County and the Texas Workforce Commission – funding is provided for a variety of career programs.

Customized Business Training
We make it easy. We deliver services at your site and on your schedule. First, our training consultants visit you to assess your needs. When it’s time to provide employee assessment services or training, you may choose the convenience of on-site service. Or you may prefer to use the outstanding facilities at the Bill Priest Institute. And we’ll deliver services any time – before work, after work, during lunch, in the evening, or on weekends. The choice is yours.

We supply our own trainers, industry-experienced experts who know their subjects well. We also offer train-the-trainer services to prepare your leaders to facilitate training sessions.

Our services are customized to meet the unique needs of each of our customers. Here are the types of services we offer:

- Leadership & Organizational Development
- Continuous Quality Improvement
- ISO 9000 Implementation
- Job Analysis & Employee Profiling
- Customer Service Training
- Basic Work Skills Training
- Business Computer Software Training
- Foreign Language Training
- Technical Skills Training

Public Workshops
Whether your employees need to upgrade their computer software skills or learn how to be better leaders, we offer training solutions at a price you can afford. The best part is these courses require a day or less away from the office. Training is offered at two locations convenient to downtown – the Universities Center at Dallas and the Bill Priest Institute.

Small Business Training
Managing a small business can be overwhelming. You can find yourself spending so much time trying to keep up with the essentials – accounting, taxes, personnel, marketing – that you hardly have time to focus on serving your customers.

Entrepreneur Bennye Dickerson launched her baby products into the marketplace with assistance from the Small Business Development Centers.
That's why so many small businesses turn to the Bill Priest Institute's Small Business Development Centers for help. A variety of low-cost and no-cost seminars are available throughout the year for training on various aspects of small business management.

As partnership programs with the U.S. Small Business Administration, SBDCs are dedicated to giving business owners free counseling and affordable training on a variety of important topics.

Experts assist you in getting your business off the ground by helping you write your business plan, acquire financing and market your products and services.

If you need help marketing on the Internet, getting a patent, obtaining government contracts, complying with environmental regulations, or entering international trade markets, our SBDCs can point you in the right direction. Just ask one of the 19,000 businesses we've assisted in the last 10 years.

Counseling
Our counselors are committed to guiding each customer toward success. From career counseling to small business development consulting, our staff provide services that help customers achieve their goals.

Free one-on-one small business development counseling is available to anyone who requires it. Many professionals and agencies work with the Small Business Development Centers to provide specialized counseling for our clients.

Nationally certified counselors address:
- Management issues
- Marketing
- Accessing Capital
- Business Expansion
- Buying or Selling a Business
- Business Start-up
- International Trade
- Government Contracting
- Patents, Copyrights & Trademarks
- Environmental Regulation Compliance
- Technology and Manufacturing Assistance

Job Placement
We help customers develop resumes and conduct self-directed job searches using the Dallas County Community College District job bank and other resources. Our Internet-based job bank provides businesses with the opportunities to post their employment needs and find qualified applicants from the pool of well-trained DCCCD students.

Office Space & Services
Keeping overhead expenses to a minimum is critical to
a start-up company’s survival. That’s why 157 companies have turned to us since the Business Incubation Center opened in 1990.

Convenient downtown location. Affordable lease rates. Access to copiers, fax machine and postage meter. Daily office cleaning and 24-hour security. The Business Incubation Center offers young, service-oriented companies the facilities they need to thrive during their first four years of business – all in an environment that encourages business growth.

Easy access to the Small Business Development Centers’ on-site training and counseling is an added bonus. Finding assistance with creating your marketing plan or obtaining a patent is as simple as walking down the hall to visit with one of the SBDCs’ counselors.

A variety of lease options are available – from single offices to four-office suites. Rates for office space are designed to provide maximum flexibility and diverse options. Space cost is based on actual square footage leased upon move-in.

We offer these services to our customers:

- Daily Office Cleaning
- Fax Machines
- Copiers
- Secure Garage Parking
- 24-hour Security and Access
- Clerical Services
- Postage Meter
- Business Research Library with Internet Access
Bill J. Priest Institute for Economic Development
Administrative Offices and Customer Service

Administration
Fax Number .......................................................... 214-860-5815
President ............................................................. Dr. Glen Bounds 214-860-5801
Vice President of Business Services ....................... Huan Luong 214-860-5717
Vice President of Instructional Services .................. Dr. Jim Picquel 214-860-5714
Director of Marketing and Public Relations ............. Georgeann Moss 214-860-5803
Human Resources Director ................................. Debbie Speck 214-860-5713
Dean, Resource Development .............................. Theresa Roffino 214-860-5716

Customer Service .................................................. 214-860-5809
Bill J. Priest Institute for Economic Development
Faculty and Administrative Staff

Dr. Glen Bounds,
President

Arnold, Bob
Ohio University, B.A.; Baylor University, M.A.

Askew, William
East Texas State Univ., B.S.

Barnes, Charles
Texas A&M Univ. Commerce, B.S., M.Ed.

Britah, Jim
Southeastern Oklahoma State Univ., B.S., M.A.S.

Blatt, Jeff
Univ. of Michigan, B.S.; Wayne State Univ., M.F.A.

Bounds, Glen
Northwestern State Univ., B.S.; East Texas State Univ., M.S., Ed.D.

Campbell, Brenda
Corpus Christi State Univ., B.B.A.

Edwards, Gordon
LeTourneau Univ., B.S., M.B.A.

Harris, Elizabeth
Ohio State Univ., B.A.

Heard, Shelly
Stephen F. Austin State Univ., B.B.A.

Holley, Stephanie
Texas Woman's University, B.S.

Howell, Rachelle
Univ. of New Mexico, B.B.A.

Huddleston, Elizabeth (Beth)
Vanderbilt Univ., B.A.; Georgetown Univ., M.A.

Kelley, Sylvia
Univ. of San Francisco, B.S.; Univ. Texas at Dallas, M.A.

Kilmeek, Liz
Caldwell College, B.A.; Seton Hall Univ., M.A.

Kula, Ed
Western Illinois Univ., B.A.

Laffoon, George

Luong, Huan
University of Dallas, B.S.B.

Marquez, Juanita
Texas Woman's Univ., B.S., M.Ed.

Pena, Miguel
Univ. of Texas at Brownsville, B.A.

Ploquet, James
Texas A & I Univ., B.S.; East Texas State Univ., M.S.; Univ. of North Texas, Ph.D.

Porter, Jackie
El Centro College, A.A.S.; Bishop College, B.S.

Roffino, Theresa
Univ. of Texas at Dallas, B.A.; Univ. of Texas at Arlington, M.A.

Selgado, Al
Eastern New Mexico Univ., B.B.A.

Rickey, Al
Collin County C.C., A.A.; LeTourneau Univ., B.S.

Speck, Debbie
Univ. of North Texas, B.S.

Solis, Lupe
Michigan State Univ., B.A.; Univ. of Michigan, M.A.

Teter-Rowlin, Cynthia
Louisiana Tech Univ., B.A.; Southern Methodist Univ., M.L.A.

Thompson, Erma
Knoxville College, B.S.; Syracuse Univ., M.S.

Waldrop, Chuck
Univ. of Wisconsin, B.A.; George Washington Univ., M.S.

Weddle, William
Indiana University, B.S.
Application for Admission
Dallas County Community College District

Educational opportunities are offered by the Dallas County Community College District without regard to race, color, age, national origin, religion, sex, or handicap.

Please check the college you plan to attend. Type or print in ink and complete all items.

SEMESTER YOU PLAN TO ENTER

- [ ] Fall (Aug. - Dec.)
- [ ] Spring (Jan. - May)
- [ ] Summer I (June)
- [ ] Summer II (July)

Please check the college you plan to attend.

- [ ] Brookhaven College
  3939 Valley View Lane
  Farmers Branch, TX 75244-4997
  972-860-4700

- [ ] Cedar Valley College
  3030 North Dallas Avenue
  Lancaster, TX 75134-3799
  972-860-8201

- [ ] Eastfield College
  3737 Moltley Drive
  Mesquite, TX 75150-2099
  972-860-7100

- [ ] El Centro College
  Main & Lamar Streets
  Dallas, TX 75202-3804
  214-860-2037

- [ ] Mountain View College
  4849 West Illinois Avenue
  Dallas, TX 75211-6599
  214-860-8680

- [ ] North Lake College
  5001 N. MacArthur Blvd.
  Irving, TX 75038-3869
  972-273-3000

- [ ] Richland College
  12800 Abrams Road
  Dallas, TX 75233-2199
  972-228-6106

- [ ] Bill J. Priest Institute
  1402 Corinth
  Dallas, TX 75215-2181
  214-860-5700

- [ ] Mountain View College
  3030 North Dallas Avenue
  Lancaster, TX 75134-3799
  972-860-8201

- [ ] North Lake College
  5001 N. MacArthur Blvd.
  Irving, TX 75038-3869
  972-273-3000

- [ ] Richland College
  12800 Abrams Road
  Dallas, TX 75233-2199
  972-228-6106

- [ ] Bill J. Priest Institute
  1402 Corinth
  Dallas, TX 75215-2181
  214-860-5700

* Your responses to these questions are voluntary.

PERSONAL INFORMATION

SOCIAL SECURITY NUMBER

[ ] [ ] [ ] [ ] [ ] [ ]

GENDER *

[ ] M [ ] F

NAME

Give full legal name. Do not use initials unless initials are your legal name.

First

[ ] [ ] [ ] [ ]

[ ] [ ] [ ] [ ]

Middle

[ ] [ ] [ ] [ ]

Last

Give names, if different from above, that are on transcripts from other institutions.

DATE OF BIRTH (MM/DD/YY)

ADDRESS NUMBER STREET APARTMENT

CITY

STATE

ZIP

FOR OFFICE USE

HOME PHONE NUMBER

( ) ( )

WORK PHONE NUMBER

( ) ( )

E-MAIL ADDRESS

INTERNATIONAL AND NON-IMMIGRANT STUDENTS (You must see an international student specialist.)

[ ] I have F-1 student visa status.

[ ] I have other non-immigrant status.

Type of VISA

Date Issued:

Expiration Date:

Country of Residence:

MY PRIMARY LANGUAGE IS:

INTERNATIONAL AND NON-IMMIGRANT STUDENTS (You must see an international student specialist.)

[ ] I have F-1 student visa status.

[ ] I have other non-immigrant status.

Type of VISA

Date Issued:

Expiration Date:

Country of Residence:

PERSON TO BE NOTIFIED IN THE EVENT OF AN EMERGENCY

Name

Phone Number ( ___ )

EDUCATIONAL INFORMATION

NAME OF LAST HIGH SCHOOL ATTENDED

CITY

STATE

DID YOU (or will you) GRADUATE FROM HIGH SCHOOL?

[ ] Yes (Year of Graduation ________ )

[ ] No (Last Year Attended ________ )

[ ] GED (Year Received ________ )

List all colleges attended, including DCCCD. Attach separate sheet, if necessary.

( list most recent first )

Name and Location (City and State)

Dates Attended

Hours/ Credits

Degree/Cert Received (if any)

Currently on Suspension

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* Your responses to these questions are voluntary.

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DCCCD Home Page URL: HTTP://WWW.DCCCD.EDU

FORM NO. 0664-0299
DOCUMENTATION & OATH REQUIREMENT

REQUIRED STATE RESIDENT VERIFICATION

DO YOU LIVE IN DALLAS COUNTY?

☐ Yes  ☐ No

HOW LONG HAVE YOU LIVED IN DALLAS COUNTY?

Year(s) _______  Month(s) _______

HOW LONG HAVE YOU LIVED IN TEXAS?

Year(s) _______  Month(s) _______

PREVIOUS STATE OR COUNTRY OF RESIDENCE


1.) If you consider yourself a resident of TEXAS for tuition purposes, CHECK ONE of the following:

☐ I am a U.S. citizen.

☐ I am a Permanent Resident, Refugee or have other legal immigrant status.

Date residency document/card issued _______________________________

Document/card number _______________________________

"Documentation must be viewed by Admissions personnel."

☐ I have filed with the proper federal immigration authorities a declaration of intention to become a citizen.

☐ I have no documentation of formal status with federal immigration authorities and have lived in Dallas County the past 12 consecutive months.

2.) If your claim for residency is based upon your having lived in Texas for the past 12 months, please answer the following questions:

IF YOU CAME HERE WITHIN THE PAST 5 YEARS, WHY DID YOU MOVE TO TEXAS?

☐ Education  ☐ Employment  ☐ Other (Please Specify) _______________________________

H ave you been employed in Texas for the past 12 months?  ☐ Yes  ☐ No

3.) If your claim for residency is based upon a parent or legal guardian (and not yourself) please answer the following questions:

NAME OF THE PERSON UPON WHOM CLAIM IS BASED

Last _______ First _______ Middle _______

☐ Parent  ☐ Legal Guardian

HOW LONG HAS THIS PERSON LIVED IN TEXAS?

Year(s) _______  Month(s) _______

PREVIOUS STATE OR COUNTRY OF RESIDENCE _______________________________

IS THIS PERSON A U.S. CITIZEN?  ☐ Yes  ☐ No

IF THIS PERSON CAME HERE WITHIN THE PAST 5 YEARS, WHY DID THIS PERSON MOVE TO TEXAS?

☐ Education  ☐ Employment  ☐ Other (Please Specify) _______________________________

HAS PARENT OR LEGAL GUARDIAN CLAIMED YOU AS A DEPENDENT FOR U.S. FEDERAL INCOME TAX PURPOSES FOR THE TAX YEAR PRECEDING YOUR REGISTRATION?

☐ Yes. If "Yes," provide copies of income tax return.  ☐ No

WILL THIS PERSON CLAIM YOU AS A DEPENDENT FOR THE CURRENT TAX YEAR?  ☐ Yes  ☐ No

OATH OF RESIDENCY

I understand that information submitted herein will be relied upon by college/university officials to determine my status for admission and residency eligibility. I authorize the college/university to verify the information I have provided and obtain my TASP test scores as necessary. I agree to notify the proper officials of the institution of any changes in the information provided. I certify that the information on this application is complete and correct and understand that the submission of false information is grounds for rejection of my application, withdrawal of any offer of acceptance, cancellation of enrollment, or appropriate disciplinary action.

Have you taken the TASP (Texas Academic Skills Program) test?  ☐ Yes. If "Yes," month and year ____________________________  ☐ No

APPLICANT'S SIGNATURE _______________________________ DATE ____________________________

The Admissions / Registrar's Office reserves the right to request additional information in order to comply with state residency requirements prior to enrollment.

DOCUMENTS SUBMITTED TO MEET ADMISSIONS AND RESIDENCY REQUIREMENTS BECOME THE PROPERTY OF THE COLLEGE AND MAY NOT BE RETURNED.