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# CENTRAL TEXAS COLLEGE



**CONTINENTAL AND INTERNATIONAL CAMPUSES  
CATALOG 1997-1999**

**Changing lives one degree at a time**

# Major Campus Addresses

## Central Campus

Central Texas College  
P.O. Box 1800  
Killeen, Texas 76540-1800  
(254) 526-7161  
(800)792-3348

## Fort Hood Campus

Central Texas College  
Dean, Fort Hood and Service Area Campuses  
P.O. Box 1800  
Killeen, Texas 76540-1800  
(254) 526-1328

## Service Area Campus

Central Texas College  
Dean, Fort Hood and Service Area Campuses  
P.O. Box 1800  
Killeen, Texas 76540-1800  
(254) 526-1206

## Continental Campus

Central Texas College  
Office of the Dean, Continental Campus  
P.O. Box 1800  
Killeen, Texas 76540-1800  
(254) 526-1222/1368

## Navy Campus

Central Texas College  
Office of the Dean, Navy Campus  
P.O. Box 1800  
Killeen, Texas 76540-1800  
(254) 526-1356  
(800) 792-3348 (Out of State)  
(800) 223-4760 (In State)

## Europe Campus

Central Texas College  
Unit #20233  
APO AE 09165  
(Civilian) 06181-95060  
(Military) 322-8871  
(Civilian) Telefax 06181-950650

## Navy Atlantic Campus

Central Texas College  
1301 East Little Creek Road, Suite 2  
Norfolk, Virginia 23518  
(804) 587-8873  
(800) 457-2619

## Navy Pacific Campus

Central Texas College  
4250 Pacific Highway, Suite 128  
San Diego, California 92110  
(619) 226-6626  
(800) 784-5470

## Pacific Far East Campus

Central Texas College  
Office of the Dean  
Office of Student Services  
Office of Administrative Services  
Office of Support Services  
Office of Payroll/Personnel  
Campus Library  
Camp Market - Building S-1650  
Unit #15559  
APO AP 96283-0618  
(Civilian) 82-32-523-5110  
(Military) 722-3814/3833  
Director, Administrative Services  
(Military) 722-3815 Student Services

# Correspondence and Inquiries

Address correspondence and inquiries to the appropriate office (for example, Admissions, Records, Student Financial Assistance) as listed in this Catalog, at the location where you currently attend. The PFEC or Europe Campus will provide records and transcript service for students currently enrolled at those areas. Students attending Continental, Air Force and Navy campus sites in locations other than Pacific Far East or Europe may request records and transcript services through the Central Campus Office.

Central Texas College District does not discriminate in admissions or access to, or treatment or employment in, its programs and activities on the basis of race, color, religion, national origin, gender, disability or age.

# CENTRAL TEXAS COLLEGE

Central Texas College District  
Continental and International Campuses Catalog  
Twelfth Edition • 1997-1999

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### Accredited by

Central Texas College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees and certificates of completion.

### Approved by

Texas Higher Education Coordinating Board; Texas Education Agency

### Listed in

Report of Credit given by American Association of Collegiate Registrars and Admissions Officers  
Accredited Institutions of Postsecondary Education American Council On Education  
Directory of Postsecondary Institutions, Volume I, U.S. Department of Education

### Member of

American Association of College Admissions Counselors, American Association of Collegiate Registrars and Admissions Officers, American Association of Community and Junior Colleges, Association of Texas Colleges and Universities, Broadcast Education Association, National Association of Veteran Program Administrators, National Association of Student Financial Aid Administrators, Servicemembers Opportunity College, Southern Association of Collegiate Registrars and Admissions Officers, Texas Association of Broadcast Educators, Texas Public Community/Junior College Association, Texas Association of Collegiate Registrars and Admission Officers, Texas Association of Collegiate Veterans Program Officers, and Texas Association of Student Financial Aid Administrators.

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A.A.S., Central Texas College  
B.S., East Texas State University  
M.S., East Texas State University  
Additional Graduate Study: Sul Ross State University, Texas A&M University University of Texas at Austin

## Term Calendar

### 1997-1998

Term 1	August 10, 1997	through	October 11, 1997
Term 2	October 12, 1997	through	December 20, 1997
Term 3	December 21, 1997	through	March 7, 1998
Term 4	March 8, 1998	through	May 9, 1998
Term 5	May 10, 1998	through	August 8, 1998

### 1998-1999

Term 1	August 9, 1998	through	October 10, 1998
Term 2	October 11, 1998	through	December 19, 1998
Term 3	December 20, 1998	through	March 6, 1999
Term 4	March 7, 1999	through	May 8, 1999
Term 5	May 9, 1999	through	August 7, 1999



# Statement of Purpose

## History

In 1965, the citizens of central Texas joined together to authorize the building of a community college that would serve Bell, Coryell, Lampasas, Mills, and seven other central Texas counties as well as Fort Hood and the correctional facilities in Gatesville. The campus was constructed on 560 acres of land donated by Fort Hood through the Department of Education and with funds supplied through a local \$2 million bond. Central Texas College, under Section 130.04 of the Texas Education Code, opened its doors with an initial enrollment of 2,068 students in the Fall of 1967. The number of students and the location of offerings has steadily increased since that time. Central Texas College has maintained its accredited status with the Southern Association of Colleges and Schools since first being awarded accreditation in 1968, and was reaffirmed most recently in December 1994.

CTC initiated on-site programs on Fort Hood in 1970 and in Europe in 1974. CTC's success at Fort Hood and Europe led to the explosive expansion of CTC's locations, including Fort Leonard Wood (Missouri), South Korea, and the Atlantic and Pacific Fleets in 1976. By the early 1980s, CTC offered programs to military personnel stationed in the Pacific Command, Alaska, and Panama as well as throughout the continental United States. This expansion occurred locally as well with the initiation of instructional programs and services for the Texas Department of Corrections in Gatesville in 1976.

Today, CTC consists of administrative units referred to as campuses: the Central Campus, the Continental Campus, the Europe Campus, the Fort Hood and Service Area Campus, the Navy Campus, and the Pacific Far East Campus. Of these, the Central, Fort Hood, and Service Area campuses operate within the state of Texas. While some campuses, like the Navy Campus, offer programs only for military personnel, others enroll military, civilian, and incarcerated students.

Students enrolled in CTC may select a degree plan from Associate of Arts degree programs, Associate of Science degree programs, Associate in Applied Science degree programs, or Associate in General Studies. In addition, students choosing to earn a certificate may enroll in any of the more than 40 certificate programs. Campuses within the Central Texas College District may offer the full range of degree programs and services or only those identified through local needs assessments. CTC also provides a wide range of education and training opportunities for those students who do not select a degree or certificate option.

## Vision

It is Central Texas College's vision to be the best possible community college in which to study and work. We want to offer each student and employee the opportunity to grow, learn, and succeed. We want our graduates to be able to compete in a global economy, make intelligent consumer choices, and exercise their rights and responsibilities as citizens. We want to celebrate our diversity while remaining united in our pursuit of excellence through continuous improvement. We want to meet the challenges of the future with students, employees, and community members working together toward the common goals of availability, accessibility, and quality in education.

## Mission and Purpose

Central Texas College is a two-year, open admissions institution which provides educational opportunities to students locally, nationally, and internationally. CTC offers vocational, technical, and academic courses leading to certification or associate degrees. CTC offers remedial and compensatory education, adult and continuing education, and workforce development training programs. CTC provides services and programs that facilitate student achievement and address the necessary needs of our military and civilian communities. CTC encourages institutional research and effective resource management. CTC insists upon excellence in all instructional, organizational, and operational areas.

The purpose of CTC is to provide:

- technical programs up to two years in length leading to associate degrees or certificates;
- vocational programs leading directly to employment in semi-skilled and skilled occupations;
- freshman and sophomore level courses in arts and sciences;
- adult, continuing, and community education programs for occupational or cultural upgrading;
- compensatory education programs designed to fulfill the commitment of an admissions policy allowing the enrollment of disadvantaged students;
- a continuing program of counseling and guidance designed to assist students in achieving their individual educational goals;
- workforce development programs designed to meet civilian and military community needs;

- adult literacy and other basic skills programs for adults;
- library services; and
- a wide variety of public service needs.

## Philosophy

Central Texas College, in meeting the educational and training needs of students in our key service populations and our civilian and military communities, is committed to:

- the belief in the worth and dignity of the individual.
- excellence in teaching and learning.
- open-door policies for meeting individual needs through a wide range of educational goals.
- a vision of community as a place to be served and a climate to be created.
- implementing the highest standards of ethical professional practice.
- effective stewardship of public trust and resources.
- offering programs that are student centered, reflect increases in the body of knowledge and changes in technology and economy, and are revised and improved continuously.
- addressing the cultural, racial, and ethnic diversity of students, employees, and community.

## Goals

### Goal 1: To Provide Instruction

Central Texas College shall provide quality instructional programs that will prepare students to fully participate in educational, occupational, economic, and social opportunities. These include certificate and/or degree programs in general education and occupational and technology; university transfer; developmental education; adult and continuing education; skills training and workforce development programs; special and enrichment education; and adult literacy and basic skills education.

**Objective 1:** To provide and update curricula district-wide that foster student goal attainment, meet changing requirements, reflect changes in instructional technology, and incorporate development of SCANS and communication skills.

**Objective 2:** To employ and retain faculty who, at a minimum, meet the qualification requirements set by accrediting associations and regulatory bodies.

**Objective 3:** To meet the educational, occupational, and developmental needs of a diverse student population.

### Goal 2: To Conduct Institutional Research

Central Texas College shall improve instructional and administrative processes and outcomes through research, demonstration projects, creative local initiatives, and well-thought-out technological innovations.

**Objective 1:** To maintain institutional and program accreditation and approval.

**Objective 2:** To evaluate continuously programs, services, processes, and personnel and use the results of such evaluations to improve programs, services, processes, and activities.

### Goal 3: To Provide Public Service

Central Texas College shall assist its communities through instructional programs tailored to their needs; economic development, technical support, and proposal/grant development services; support of cultural activities; employee participation in community activities; and other related cooperative efforts.

**Objective 1:** To cooperate with communities in meeting their educational, economic, and cultural needs.

**Objective 2:** To promote the institution as a partner with the community it serves.

### Goal 4: To Provide Institutional Support and Ancillary Operations

Central Texas College shall provide the direction; control; educational support services (including student development services, library services, instructional services, etc.); resource management services; and other services and resources as may be required by the institution to accomplish its mission.

**Objective 1:** To use effectively and efficiently the human, fiscal, and physical resources of the institution.

**Objective 2:** To promote equal access and equal opportunity.

**Objective 3:** To provide educational and training opportunities for employees that foster professional growth.

**Objective 4:** To maintain an organizational structure and culture that supports responsive decision making; creates a positive work environment; and assures compliance with regulations, laws, and mandates.

# **General Information**

## **Continental and International Programs**

Central Texas College serves military personnel throughout the world. Central Campus is located in Killeen, Texas. Programs of study vary with each location and not all programs are available at every location. This Catalog provides information concerning the policies, procedures, and programs applicable to locations operated outside the state of Texas. Individuals interested in programs which are not locally available should consult with the local Education Services Officer (ESO), Navy Campus Representative (NCR), Education Specialist, or Central Texas College representative.

## **The Catalog**

This Catalog is an official publication of Central Texas College containing policies, regulations, procedures, and fees in effect at the time it was published. Central Texas College reserves the right to make changes at any time to reflect current Board policies, administrative regulations and procedures, amendments to state or federal laws, and tuition or fee changes.

Study the contents of this Catalog carefully; as a student, you are responsible for observing the regulations contained herein.

## **Program and Course Availability**

Programs of study presented in this Catalog are offered when sufficient interest indicates the level of enrollment required for program continuation. To enter specific programs of study, seek confirmation of program availability before you register the first time.

Central Texas College further reserves the right to adjust course scheduling, including class cancellation, when enrollment or other circumstances require this action.

## **Equal Opportunity Policy**

Central Texas College is committed to its policy on equal educational opportunity and administration of its educational programs, activities, and employment without regard to color, race, religion, national origin, disability, age, or gender as required by Title VI and Title VII of the Civil Rights Act of 1964, as amended, Title IX of the Education Amendments of 1972, the Rehabilitation Act of 1974, the Vietnam Era Veteran's Assistance Act of 1974, the Americans with Disabilities Act of 1990, and Executive Orders 11246, as amended, and 11375.

Central Texas College has established programs to ensure that a lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs.

Existing administrative procedures of Central Texas College are used to handle student grievances. If you believe a condition or employee of Central Texas College is unfair or discriminatory, you can appeal to the administrator in charge of that area. If you need assistance pursuing a grievance matter, contact an official or the Campus Dean at your Central Texas College location.

## **Statement on Harassment and Discrimination**

Central Texas College is committed to providing an educational and work climate that is conducive to the personal and professional development of each individual. Faculty, staff, and students should be aware that discrimination and harassment based on the age, ethnic background, family status, gender, disability, national origin, race, religion, sexual orientation, or veteran status of individuals or any other subgroup stereotyping or grouping within the college community are unacceptable. To fulfill its multiple missions as an institution of higher learning, Central Texas College encourages a climate that values and nurtures collegiality, diversity, pluralism, and the uniqueness of the individual within our state, nation, and world. Central Texas College also strives to protect the rights and privileges and to enhance the self-esteem of all its members.

Individuals who believe they have experienced harassment or discrimination are encouraged to contact the appropriate offices where they attend. Students should contact the appropriate Campus Dean, faculty should contact the Deputy Chancellor for Campus Operations at 254/526-1781, and staff should contact the Human Resources Department at 254/526-1157.

## Admissions and Registration

Students wishing to attend Central Texas College should visit the local Education Center or Navy Campus office to consult with the ESO or NCR about educational goals. Education Center and Navy Campus offices provide diagnostic, aptitude, and placement testing to assist students in selecting programs of study and educational goals. Once you have identified and chosen an appropriate degree and program of study, the admission and registration process may begin.

## General Admissions Information

Address requests for application materials or questions concerning admission to the Central Texas College personnel at each location.

Central Texas College is a comprehensive community college that maintains an open-door admissions policy to ensure that all persons who may benefit from postsecondary education have the opportunity to enroll. New students will be admitted to Central Texas College providing all admissions requirements are met. Admission to Central Texas College does not guarantee admission to specific programs and courses. In addition to the following criteria, students must complete an Application for Admission form prior to being considered for unconditional admission.

Individuals who have not previously earned a high school diploma or GED are not eligible to enroll in college-level coursework until they have taken and successfully passed an independently administered Department of Education examination. The examination must have been taken within the past year.

Non-graduates seeking further information should contact their Central Texas College representative.

## Admissions Requirements

Students who hold diplomas from accredited secondary (high) schools or General Education Development (GED) equivalency certificates will be admitted to Central Texas College. Students transferring from another regionally accredited college will be admitted if they are eligible to return to the institution last attended. Adults, veterans, and military personnel who have not completed a high school program, but who are prepared to undertake post high school studies may be admitted if recommended by an education specialist after providing official test scores from a list of approved tests authorized by the Department of Education.



An adult, for purposes of admission, is defined as an individual 18 years of age or older.

## Admission Requirements-International Students

Local and third country national students must provide an official certificate of a minimum score of 450 on the Test of English as a Foreign Language (TOEFL) to be considered for admission to degree-credit courses. Those individuals scoring 450-499 will be eligible for college-level coursework if they successfully pass applicable sections of the CTC placement exam. Students scoring 375 and above are eligible for admission to developmental studies courses.



Personnel not sponsored in the overseas command by the U.S. Armed Services are not normally permitted to attend Central Texas College classes. Applicants may attend classes if local policy permits, but they must receive approval from the local ESO or NCR for necessary military and governmental approval prior to being permitted to file application for admission. Active duty personnel will have priority when enrolling for all classes.

## Re-admission Requirements

Central Texas College students who have not enrolled for two years or more at Central Texas College must re-complete the admission process. If you have attended other institutions during your absence from Central Texas College, you must provide transcripts from all institutions attended during the absence.

## Early Admissions

Early admission offers the opportunity for high school students to earn college credits while concurrently enrolled in high school. Early admission is open to selected high school students, subject to the following conditions:

- An Early Admission Form with the signatures of the high school principal or counselor and parent or legal guardian must be submitted;
- Students must provide an official high school transcript showing classification; and
- Students will be expected to adhere to all policies of Central Texas College and the high school, including attendance.

Students who meet the above criteria will be accepted at Central Texas College on individual approval to take one course per term.



Central Texas College assumes no responsibility for loss of Interscholastic League eligibility of high school students enrolled under this program.

## Records Required

### Transcript and Test Scores

Degree or certificate seeking students must ensure that all records of previous education are on file with the Records Office to fulfill admission requirements of Central Texas College.

- High School Graduates: Degree or certificate seekers who have not previously completed 12 semester hours of coursework from a regionally accredited college or university must submit high school transcripts.
- High School Equivalence Graduates: Degree or certificate seekers who have not previously completed 12 semester hours of coursework from a regionally accredited college or university must submit High School General Education Development (GED) scores.
- College Transfer Students: Transfer students who are seeking certificates or degrees from Central Texas College must provide official transcripts for all regionally accredited college study before official degree plans are provided.
- Individual Admissions Students (except transient students): These students must provide official transcripts for all previous college study from accredited colleges or universities they previously attended. Non-high school/GED graduates must provide Department of Education approved test scores taken within the past year.



You are responsible for requesting that official records be forwarded directly from the issuing institution to the Central Texas College campus serving your location. To be acceptable, transcripts must bear original mark or seal and signature of the registrar. Under the provisions of the Family Education and Privacy Act, CTC will not release copies of transcripts received from other institutions.

Addresses are listed in the front of the Catalog. If transcripts of previous education are issued to Central Texas College in your former name, without a social security number, Central Texas College cannot be responsible for properly identifying the document. Admission requirements are not met until all necessary records are on file with the appropriate campus records office.

All transcripts must be received prior to the end of the first semester or second eight-week term of enrollment. Grades will not be mailed to students who are on Admissions Hold for required transcripts.

## Transient Students

Students not seeking a degree or certificate from Central Texas College are not required to provide previous education records unless required for Financial Aid or Veterans Affairs Services. Records will be required if the student later elects to seek a diploma or certificate, or evaluation and award of credit.

## Transfer Students

Transfer of credit from regionally accredited colleges and universities may be accepted when the grade earned was “C” or higher and the coursework applies to the student’s curriculum. Passing grades lower than “C” may be considered for transfer in accordance with current evaluation procedures and curriculum requirements. Grades other than “A,” “B,” or “C,” or “CR” will not be accepted in transfer in major degree requirements.

Because of the rapid changes taking place in technological fields, coursework taken in a major field of study or courses directly related to the major field may not be accepted in transfer to satisfy specific Associate in Applied Science degree requirements. Acceptance of course credit in transfer for the above mentioned programs must be approved by appropriate Central Texas College officials when coursework was completed five years ago or longer before the student entered the Central Texas College program of study.

## Uniform Application of Standards

The standards of CTC policy relative to the academic status of students and all matters relating to students are uniform at all locations served by Central Texas College. The subsequent sections of this Catalog provide information required and unique to Continental & International campuses.

## Registration

Typically Central Texas College assigns a representative to each Education Center or CTC office where a program is conducted. Information on registration, term dates, evaluations, programs offered and related questions should be directed to the local Central Texas College representative at the Education Center, Navy Campus office or to the local Central Texas College office.


### Registration Periods

Central Texas College conducts an academic year beginning and ending in August. It is based on terms and varies considerably at different locations to meet military schedules. Course lengths are four, six, eight, ten, and twelve weeks. Varying course lengths or the special needs of the community may alter the generally established registration period at any given site. The Education Center publicizes registration periods, term dates, and course offerings. Consult your local schedule for times and dates of registration and classes.

### Registration Requirements

Official registration with Central Texas College is required before you may begin coursework. The following must be completed before you will be officially registered:

1. Application for Admission/Class Registration (required each time you register);
2. Payment of fees and tuition.

 Step 2 may include providing completed military tuition assistance forms or completed Veterans Administration forms if this method of financial assistance is chosen to pay for coursework.

All forms necessary for registration are available from the Central Texas College representative at each location.

### Late Registration

Late registration is permitted for a limited time after class begins. Consult local schedules for exact dates. Students who complete registration after classes begin are not excused from meeting attendance or academic requirements and must arrange with the instructor to make up missed classes. No student will be permitted to register after the scheduled late registration period ends.

### Adding or Dropping Classes

To register for additional courses, or change course enrollments after registering, have the amendments made on the registration card. Complete and initial such changes before the announced end of the registration period.

### Official Enrollment

The only way to become an official member of a class at Central Texas College is by following the established procedures for registering and paying tuition and fees. No person is officially enrolled until all charges have been paid in full. When you officially withdraw from a course, you are not entitled to remain in class on an unofficial basis. Only those students who are officially enrolled have the privilege of attending classes.

# College Costs

## Tuition

Tuition for classes at Central Texas College locations outside the Central Campus varies with the government contract or Memorandum of Understanding through which the institution operates. Therefore, both tuition and fees may be adjusted, based on government contracts and local conditions, during the period this Catalog is in effect.

Costs of classes to students will vary with the level of support being provided by the sponsoring agency at each campus or site.

Obtain information about current tuition, fees and costs of classes from the Education Officer, Navy Campus Representative, and the Central Texas College representative.

## Fees

**Institutional Challenge Examination Fee:** A \$50 fee for each challenge exam should accompany the Application for Exam.

**Degree Fee:** A non-refundable fee of \$25 is payable at the time you apply for a degree or certificate of completion.

**Certificate Fee:** A non-refundable fee of \$10 is payable at the time you apply for a 15 or 30 semester hour certificate.

**Transcript Fee:** The first transcript is issued free of charge. Subsequent transcripts are \$3 each.

**Returned Check Charge:** A charge of \$25 is made for all checks which have been returned for insufficient funds.



Refund of overpayment of transcript or record fees will be made only upon written application by the student.

## Payment

Make checks or money orders payable to Central Texas College. Central Texas College requires payment of tuition and applicable fees before attendance at the first class meeting.

## Refunds

The effective date of the withdrawal is the date the withdrawal form is date stamped at the appropriate Education Center or Navy Campus Office and signed by the ESO or designated representative. In all cases, the instructor must sign the withdrawal form, either before or after the effective withdrawal date.

Refunds will be computed from the effective date and will be made according to the following schedule unless publicized differently at the local education center or local CTC office:

- 100% Withdrawal before the first class meeting.
- 75% Withdrawal if not more than 1/8 of the total class meetings have elapsed.
- 25% Withdrawal if not more than 1/4 of the total class meetings have elapsed.
- 0% Withdrawal if more than 1/4 of the total class meetings have elapsed.

The Director of Administrative Services will process refunds after receipt of certification by the Student Services Office that the Application for Withdrawal or the Application for Refund form has been properly completed and processed.

Emergency withdrawal will be considered to be filed on the date of the emergency. Students must submit written proof of emergency such as military emergency leave orders or medical certification of family emergency. Refunds under emergency conditions will follow the refund of tuition schedule above.

## Pro Rata Refund

The 1992 Reauthorization of the Higher Education Act requires an institution to have a fair and equitable refund policy for students who received federal aid or whose parents borrowed under the Federal PLUS program. Equitable means that the policy must be consistent with the standards approved by the Department of Education.

A fair and equitable refund policy will provide a refund of at least the largest amount under:

- applicable state law;
- pro rata, for any student attending Central Texas College for the first time whose date of withdrawal is at or before the 60 percent (nine weeks into a 16 week semester) point in the period of enrollment for which the student has been charged. (Pro rata means a refund of the amount that was charged by the institution for the time that remains if a student withdraws on or before the ninth week of classes.)

According to the federal regulations, refunds must be credited to the federal program in the following order:

1. Federal Family Education Loan Programs (Stafford, Unsubsidized, PLUS);
2. Federal Perkins Loan Program;
3. Federal Pell Grant;
4. Federal SEOG;
5. Other Title IV Programs; and
6. Finally, the student.

## Textbooks

Prices are based on publishers' prices and may vary from term to term. Prices are available from the Central Texas College representative. Textbook costs are not refundable unless the class is canceled by CTC and the book is returned unused and unmarked to the appropriate Central Texas College representative.

Students are expected to buy the textbooks designated for each course unless otherwise specified. Textbooks may be purchased from the Central Texas College Site Representative during the registration period. This period is normally two weeks prior to the class starting date and during the first week of classes. After the registration period, students may obtain textbooks by contacting a Central Texas College representative.

# Student Services

## Transcripts

Students' records are confidential. Convenient forms for ordering transcripts are available at your location.

Upon graduation, graduates are provided an information transcript free of charge. The fee of \$3 for all transcripts must accompany the written request signed by the student. Transfer credits from other colleges are not listed on the Central Texas College transcript. Students should request transcripts directly from other colleges attended if the information is needed.

Requests for transcripts will be honored as soon as possible in the order of receipt. During peak periods, such as graduation, end of term and registration, additional time will be needed to process the request. Telephone and E-mail requests will not be honored. It is not acceptable practice to send or receive facsimile (FAX) transcripts.

Address requests for transcripts to the Overseas Campus Student Services Office if attending Europe or Pacific Far East Campuses. If attending at any other site, request your transcript directly from the Transcript Department, Killeen, Texas. Addresses are listed in the front of this Catalog. Transcript requests should include full name, social security number, date of birth, last month, year, and location of attendance, as well as the complete address to which the transcript is to be sent. Transcripts addressed to students will be stamped "Issued to Student." Transcripts addressed to official addresses will be official transcripts.

When departing Central Texas College locations in Europe and the Pacific Far East, notify the administrative office to ensure your records are transferred to the Central Campus Records Office. Student academic files and transcripts will be maintained in Europe or the Pacific Far East for five years after last attendance unless otherwise notified of departure.

Requests for student transcript services will be denied if you have an outstanding obligation to Central Texas College. The obligation may be because of a library fine, parking ticket, returned check, non-repayment of financial aid, or failure to comply with admissions requirements.

Students on financial hold will not be eligible for evaluation services, transcripts or graduation consideration.



Records of students attending Europe and Pacific Far East Campuses are maintained at those campus offices in Germany and Korea until the branch campus is informed by the student in writing that the student has moved. Academic records are then transferred to the Central Campus office.

## Evaluation of Previous Education

### Non-traditional Education

Central Texas College recognizes that each student's educational needs, goals, and experiences are unique and that individuals are skilled in many areas of college work that are not formally documented on transcripts. It is the policy of Central Texas College to recognize non-traditional learning experiences and to award course credit in all cases where such credit is appropriate. In keeping with this policy, Central Texas College has established the Individualized Career Evaluation Process (ICEP).

The purpose of ICEP is to systematically correlate business, industry, government, and military education received by non-traditional methods with institutional curricular requirements.

All students, including military, former military and civilians, are eligible for credit consideration based upon documentation of their previous learning experiences.

The non-traditional methods usually considered applicable toward a degree at Central Texas College are:

- The Defense Activity for Non-Traditional Educational Support (DANTES) courses and Subject Standardized Tests.
- College Level Examination Program (CLEP)—both the General Examination and Subject Examination.
- Institutional Course Challenge Examination—Students may request, through the appropriate Central Texas College official, permission to take challenge examinations for certain courses. Students must not have previously enrolled in the course for college level credit and must have completed a minimum of six semester hours in residence with Central Texas College with a minimum 2.0 grade point average. Those who do not make a grade of “A” or “B” will not be permitted to repeat the examination for that course at a later time. To obtain credit, the student must pass the examination with a grade of “A” or “B”, have completed a minimum of 6 semester hours of coursework at Central Texas College with a minimum 2.0 grade point average, and submit an application for credit award.
- Credit for military schools completed, as recommended by the American Council on Education (ACE) and recognized by Central Texas College.
- Credit for military service basic training.
- Military Job Training and Experience, as recommended by the American Council on Education and recognized by Central Texas College.
- American College Testing Program (ACT).
- College Board Admission Testing Program.
- Correspondence Extension Courses offered by regionally accredited institutions which are members of the National University Extension Association.
- Other, to include certain types of civilian training, specialized testing, and work experience.



To obtain credit, the student must pass the exam, apply for credit, and have completed a minimum six semester hours of coursework at Central Texas College with a minimum 2.0 GPA or six semester hours of “C” or higher. Tests and other non-traditional educational experiences completed in excess of seven years prior to the student’s completion of six semester hours in residency with CTC will not be eligible for credit consideration. Credit will not be awarded for courses in which student was previously enrolled. Evaluated credit will be awarded only when it applies to the student’s degree requirements.

## Evaluation Procedures

Curriculum plans outlining accepted transfer and non-traditional credits as well as remaining requirements are available from Central Texas College, military education centers, or the Navy Campus advisors upon the student’s written request and submission of evaluation documents.

Evaluation and final degree plans are provided upon receipt of all official transcripts and documents. Evaluated credit must be validated through successful completion (with a grade of “C” or better) of a minimum of six semester hours of traditional credit earned at CTC. Students on financial hold will not be eligible for evaluation of non-traditional educational experiences until the financial hold is cleared. Validated evaluated credit will be posted to the student’s transcript as part of the evaluation process.

Apply for a final degree plan by submitting an Evaluation Request form to the Evaluations Department, Central Texas College, at the administrative office serving you. Addresses are listed in the front of this Catalog.

Evaluated credit awarded by Central Texas College applies to its programs of study and may transfer to other institutions according to the policies of the receiving institution. If planning to transfer to other institutions, consult with those institutions regarding their policies on acceptance of evaluated credit.

## Servicemembers Opportunity College

Because of its efforts to serve the educational needs of servicemembers, Central Texas College has been designated a Servicemembers Opportunity College. As a member of the Servicemembers Opportunity College Associate Degree (SOCAD-2, SOCNAV-2, and SOCMAR-2) programs, Central Texas College has committed itself to fully support and comply with SOC Principles and Criteria. Through this commitment, Central Texas College ensures that:

- Servicemembers share in the postsecondary educational opportunities available to other citizens.
- Servicemembers are provided with appropriately accredited educational programs, courses and services.
- Flexibility of programs and procedures, particularly in admissions, credit transfer, recognition of non-traditional learning experiences, scheduling, course format, and residency requirements, is provided to enhance access of servicemembers and their family members to undergraduate educational programs.

## **SOC Criteria**

In support of SOC criteria and service to its military students, Central Texas College:

- has designed a transfer program that minimizes loss of credit, avoids duplication of credit, yet maintains program integrity;
- has established guidelines that follow the general principles of good practice outlined in the joint statement on transfer and award of academic credit;
- accepts transfer credit earned from regionally accredited institutions consistent with servicemembers degree programs;
- requires only 25% of degree requirements to satisfy Central Texas College residency;
- recognizes as study in residence all credit coursework offered by Central Texas College, regardless of location;
- allows students to satisfy residency requirements with courses taken at Central Texas College at any time during their course of study;
- provides the Individualized Career Evaluation Process (ICEP) to assess learning equivalence and awards credit to qualified students for specialized military training and experience in accordance with the ACE guide to the Evaluation of Educational Experiences in the Armed Services; and
- provides the ICEP, which reflects the principles and guidelines set forth in the statement on awarding credit for extra institutional learning and awards credit for non-traditional learning assessment programs.

## **SOCAD-2/SOCNAV-2/SOCMAR-2 Degree Completion Agreement**

All students can continue their Central Texas College certificate/degree programs regardless of location, through the “credit bank” provisions of the Servicemembers Opportunity College. A student may study at any other regionally accredited college and apply the work toward Central Texas College certificate/degree requirements. Students must complete at least 25 percent of degree requirements with a minimum 2.0 GPA at Central Texas College. Courses taken at other institutions must satisfy the course requirements of the Central Texas College degree programs. SOCAD-2/SOCNAV-2/SOCMAR-2 agreements may be issued after the completion of at least six semester hours of coursework with a 2.0 GPA or six semester hours of “C”, “P”, or higher at Central Texas College. Request these agreements from the Administrative office serving your location. Addresses are listed in the front of this Catalog.

Students no longer at a Central Texas College location should contact the following:

Central Texas College  
Director, Evaluation Services  
P.O. Box 1800  
Killeen, TX 76540-1800  
800/792-3348, extension 1374

If completing certificate/degree requirements with credits from other institutions, contact the above address for approval of specific courses. Please allow at least four weeks for approval.

# Student Financial Assistance

## Financial Aid Programs

Information and application forms for military tuition assistance and VA benefits are available at military education centers and Navy Campus offices. These two forms of student financial assistance are not part of the same program. Students interested in using such aid should be aware of the liabilities incurred.

## Satisfactory Progress Standards

Central Texas College students who are receiving financial aid are required to make adequate progress toward a degree objective in order to remain eligible to receive financial aid.

The following satisfactory progress standards are applicable to all students who receive financial aid at Central Texas College:

- The maximum time frame for the completion of a degree program is the equivalent of six 12-week or 16-week semesters of full-time enrollment. This time frame includes the entire attendance history of a student regardless of whether financial aid was or was not received.
- The time frame for students enrolled full-time (enrolled in six or more credit hours) shall be no more than 12 eight-week terms of full-time enrollment to complete a degree program.
- Half-time students (enrolled in three to five credit hours) shall have 24 eight-week terms of half-time enrollment to complete a degree program.

Satisfactory progress can be met with any combination of full-time or part-time enrollment. Refer to your degree plan, SOC agreement, Central Texas College Catalog, or see a CTC representative for further details regarding the specific academic program.

## Types of Aid

### PELL Grant

The PELL Grant is authorized by the Higher Education Act Amendments of 1972 to assist students in pursuing their first undergraduate degree. The intent of the PELL grant is to provide a foundation of financial assistance to supplement the cost of postsecondary education. The amount of the PELL award is based on the actual cost of the student's education while attending Central Texas College. Applications are available at the military education center or Navy Campus office. Brochures describing various financial aid and VA programs are available to all students at education centers and Navy Campus offices.

### Federal Stafford Loans

An undergraduate student at Central Texas College may borrow a limit of \$2,625 during the freshman standing (0-30 credit hours on the student's Central Texas College degree plan) and \$3,500 during the sophomore standing (31-60 hours on the student's Central Texas College degree plan). These are loans obtained by the student from a lending agency outside CTC such as a bank, savings and loan association or credit union, that are insured by the federal government. The government will pay the interest charge while the student is enrolled at least half-time. Repayment begins six months after you leave school.

Interested students should obtain detailed information and application forms directly from lending institutions or the appropriate CTC official.

Loans must be repaid. Students who are awarded Stafford Loans (GSL) or Perkins Loans (NDSL) must attend a pre-loan counseling session. This session provides additional information about the loan programs such as monthly repayments, deferments, grace period and cancellations. The applicant will be advised of the disbursement procedures during the counseling session. Students receiving loans must advise the Office of Student Aid when leaving Central Texas College. Each student must have an exit interview regarding their rights, responsibilities and loan payment scheduling. All programs are administered in compliance with section 504 of the Rehabilitation Act of 1993.

## **Veteran Benefits**

Most Central Texas College programs are approved for those who wish to attend and receive benefits under the Veterans Readjustment Benefits Act of 1966, the Veterans Educational Assistance Act of 1984, Chapter 106-Reserve Education Bill, Chapter 30, VA Educational Bill of 1986 and dependents qualified for VA educational benefits, Chapter 35.

## **Military Tuition Assistance**

Many military personnel, whether or not eligible to participate under the Veterans Readjustment Benefits Act, may wish to attend Central Texas College under the Tuition Assistance Program.

Active duty military students approved under this program will have a portion of tuition cost paid by the government but will be responsible for paying the remaining amount as well as all fees and book costs.

As a recipient, make sure that you are informed of all conditions of the Tuition Assistance Program. Information about such conditions may be obtained at the military education center or Navy Campus office.

The Air Force, Army, Marines, and Navy have tuition assistance programs. Students attending classes at Central Texas College should complete their appropriate service form and deliver it to the appropriate Education Center or Navy Campus office. The signature of the student's unit commander (or authorized representative) and the approving signature of the appropriate education center or Navy Campus representative are required.

## **Department of Defense Civilian Tuition Assistance**

The applicant is responsible for securing tuition assistance from the employer. Forms and procedures for requesting tuition assistance vary with each branch of service. Please consult the local ESO, NCR, or Civilian Personnel Office.

Provide one copy of the approved tuition assistance form to Central Texas College when you register.

# Academic Policies

## Academic Load

Students are responsible for determining the academic load they can successfully manage each term. Typical course loads, based on eight-week terms, are as follows:

Half time	3 semester hours per term
Three quarter time	5 semester hours per term
Full time	6 semester hours per term

- For schedules other than eight weeks, consult with the Central Texas College representative.
- Final determination of academic load for purposes of VA benefits payments is the decision of the Department of Veteran Affairs, not the institution. Send questions about VA payments directly to the VA Office serving your campus.

Working students and students who may have difficulty with college-level courses are encouraged to consult with Central Texas College personnel or the Education Center or Navy Campus counselors for advice on the number of hours to take.

## Attendance Policy

### Class Attendance

You are required to attend all classes in which you have enrolled. Attendance should be regular and on time.

Absences for any reason negatively affect the learning process, the individual student, and the class. When absence from class is necessary for any reason, you have the responsibility to arrange to make up assignments missed during the absence.

Notify instructors in advance of any absence to retain the privilege of submitting make-up work without grade penalty.

### Absences

The following specific rules apply to absences:

- Missing a class meeting of 50 minutes equals one absence.
- Beginning the first scheduled day of class meeting, instructors are required to keep attendance records.
- An administrative withdrawal may be initiated when you fail to meet Central Texas College attendance requirements. The course will be noted as "FN" on the roll and record book, with a final grade of "F" on the transcript.
- As a matter of policy, Central Texas College instructors are the only individuals who can authorize excused absences. Regardless of the reason for the absence, you are responsible for completing all coursework covered during any absence.

### Excessive Absences

Absence from classes for any reason must not exceed Central Texas College standards. In general, you may be administratively withdrawn from any class with the grade of "F" when your unexcused absences reach a total equal to 12.5% of the hours for the course. For example, an eight-week, 48-hour class normally meets for 180 minutes each session for 16 sessions. If you have two unexcused absences while taking this class, you will be subject to Administrative Withdrawal since the total unexcused absences (360 minutes) equals 12.5% of class hours for the course. If you attend a 96-hour class, you are subject to Administrative Withdrawal after you have accumulated 12 hours of unexcused absences.

## Official Withdrawal Policy

If you desire to, or must, withdraw from a course after the first scheduled class meeting, you must file an Application for Withdrawal with the instructor. In addition, you must file with the Education Services Officer or Navy Campus Representative. Applications for Withdrawal or Applications for Refund will not be accepted after the close of business on the last working day before the last week of class.

If you are using financial aid, military tuition assistance, VA benefits or other than personal funds, you may be required to repay tuition and fees to the funding agency, if you withdraw. For specific repayment requirements, consult with the Student Services office. Military tuition assistance students, consult with the military education center or Navy Campus office. Students who are administratively withdrawn from classes without officially withdrawing will receive an "F" grade and are ineligible for refunds.

You may not withdraw from a class for which the instructor has previously issued you a grade of "F" for non-attendance. Emergency withdrawal will be considered when documentary evidence is presented. Also see the section in this Catalog on Refunds.

## Student Classification

**Freshman** thirty semester hours or less of college-level credit recorded on your permanent record.  
**Sophomore** thirty-one semester hours or more of college-level credit recorded on your permanent record.

## Resident Credit

You may earn an Associate Degree entirely through study at campuses outside the state of Texas or in combination with study at the Texas campuses. At least 16 semester hours or 25% of degree requirements must be earned through formal study at Central Texas College, regardless of campus location. Courses offered at all Central Texas College campuses meet the same academic standards and carry the same resident credit.

## Credit Transfer

### To Other Colleges and Universities

Central Texas College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees and certificates of completion. Credits earned at Central Texas College are transferable to other institutions in accordance with policies of the receiving institutions. Students who plan to transfer to other institutions for degree completion or to pursue a more advanced degree are advised to consult with officials of the receiving school for degree requirements and transfer policy.

### Maximum Hours for Transfer To Other Colleges

As a general rule, senior colleges will accept a maximum of 66 semester hours of transfer credit from junior colleges. Students who plan to transfer should not take more than this number of hours unless they have written permission from the chosen senior college.

## How to Choose Courses

### Common Course Numbers

Central Texas College has adopted the Texas Common Course Numbering Systems (TCCNS).

The courses with common numbers in this Catalog have the course prefix and course number as shown below:

HIST 2311      Survey of Western Civilization I    (3.0)    Credit: 3

The first digit of the course number is the scholastic level:

O-Developmental; 1-Freshman; 2-Sophomore

The second digit indicates the amount of credit hours assigned to the course. In the example above, three credit hours will be awarded upon successful completion of the course. The last two digits are for department use only.

### Taking a Course Out of Sequence

If you, for scheduling reasons, find it desirable to take an advanced course prior to completing the prerequisite, be sure to secure, in writing, approval from the appropriate Central Texas College representative prior to registering for the course. Failure to obtain approval could result in loss of credit toward the degree. The final responsibility for taking advanced courses without completing the required prerequisite rests with the student.

# Grading Policy

## Reporting

Grades are assigned by faculty members based on attendance, class and laboratory performance, test scores and other departmental academic requirements. You are encouraged to become familiar with each instructor's requirements for grades and class syllabus.

Grades are reported by two methods:

- Grade reports are provided by faculty members at the end of each course. This method of reporting grades permits students to judge their performance at the end of each course.
- Transcripts are provided by the Records Office and are the official report of completed courses, grades, and credit awarded by Central Texas College.

## Grading System

The grading system at Central Texas College is as follows:

Grades		Grade Points
A	Superior	4
B	Above Average	3
C	Average	2
D	Passing, but Unsatisfactory	1
F	Failure	0
I	Incomplete	0
N	No Credit	0
P	Completed	0
W	Withdrawal	0
XN	Nonattendance	0
FN	Nonattendance	0
Y	Incomplete	0

## Grade Designations

### “D”

Students receiving a “D” grade in prerequisite courses are advised not to enroll in succeeding courses until they complete prerequisite coursework with at least a “C” grade. A “D” grade will not be acceptable toward graduation for any course in the major in the Associate in Arts, Science, or Applied Science degree programs.

### “F”

Failure or “F” may be assigned for lack of academic progress or failure to attend. “F” grades may not be overridden with “W” or “I” grades. Students who elect to repeat a course for which they have received an “F” must re-register, pay full tuition and fees, and repeat the entire course.

### “I”-Incomplete

An incomplete grade may be given in those cases where a student has completed the majority of the coursework, but because of personal illness, death in the immediate family, or military orders, is unable to complete all the requirements for a course. Instructors may require notice of absence with supporting documentation. Notify instructors in advance of absences whenever possible. The instructor makes the final decision concerning the granting of the incomplete grade.

In assigning the grade of “I,” the instructor may set a deadline for completing the remaining course requirements. In no case will the deadline exceed 90 days after the scheduled end of the class. It is your responsibility to arrange with the instructor for the assignment of work necessary to complete the course and change the “I” grade within the time specified. An “I” grade cannot be replaced by the grade of “W.” If you elect to repeat the course, register, pay full tuition and fees, and repeat the entire course.



In calculating the grade-point average for graduation or other purposes, the “I” grade is calculated as an “F”. Students must complete course requirements to replace the “I” within the period specified.

**“N”-No Credit**

The grade of “N” is reserved for use with developmental and designated non-traditional modular courses and will be assigned to students who have made satisfactory progress, but lack the successful completion of certain modules required for course completion. The grade of “N” indicates that the student must enroll the following semester and complete those modules for a final grade in the course. Re-enrollment requires the payment of usual tuition and fees for the course.

**“P”-Completed**

The grade of “P” is reserved for use with developmental and designated non-traditional modular courses and will be assigned to students who have satisfactorily mastered all the course requirements. When used with credit-granting courses, earned credit hours will be displayed on the transcript. Quality points and grade point calculation are not computed.

**“X”-Non-Attendance**

The grade of “X” is reserved for use with developmental and designated non-traditional modular courses and will be assigned to students who have failed to make satisfactory progress because of failure to attend.

**“W”-Withdrawal**

Students who officially withdraw will receive the grade of “W,” provided attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with Central Texas College before they may be considered for withdrawal.

**“Y”-Incomplete**

The grade of “Y” is reserved for students receiving “incomplete” in developmental courses only.

**Grade Point Averaging**

A student’s grade point average is calculated by dividing the total grade points by the total attempted semester hours. Grades of “W,” “N,” “P,” “X” and “Y” are not included in these calculations. Grades from developmental courses are not calculated.

**Grades and Financial Aid**

If you are attending Central Texas College with military tuition assistance, financial aid, or VA benefits, be familiar with the requirements and possible obligations incurred, particularly upon receiving a grade of “F,” “I,” “W,” “N,” “X,” or “Y.”

**Change Of Grades**

Students who believe that a computational error occurred in grading must immediately contact the instructor of the course in question. Students must bring this matter to the attention of the instructor involved no later than 90 days after the end of the course in order for a grade change to be considered. Administrative personnel of Central Texas College are not authorized to change an instructor’s grade.

**Repeating a Course**

The total hours earned toward a certificate/degree are not increased if a student repeats a course in which a passing grade has already been earned, although both grades remain on the transcript. When repeating a course, only the last grade earned is utilized in computing the grade point average. Other colleges may compute the GPA in a manner different from Central Texas College. Honors designation at graduation considers all grades, including repeated courses. A student who repeats a course should notify the Records Office for re-computation of cumulative grade point average.

**Student Responsibility to Know GPA**

You are expected to be aware of your grade point average. The method of calculation of grade point average is explained above. You are encouraged to compute your grade point average frequently. You are responsible for knowing whether or not you are eligible to continue at Central Texas College. An ineligible student who nevertheless registers at Central Texas College shall be withdrawn, and the student shall not receive special consideration for lack of knowledge of scholastic status. If you receive grades below “C” (2.0) for any course, seek academic advisement to determine the causes of unsatisfactory work and receive recommendations for improving grades in subsequent classes.

**Honor Roll**

Students completing 12 or more semester hours of college level credit during two consecutive eight-week terms with a grade point average of 3.5 or higher receive Honor Roll status. This recognition will be listed on the student transcript.

## Graduation Grade Requirements

To graduate from CTC, you are required to have an overall grade point average (GPA) of 2.0, to include a minimum 2.0 GPA with Central Texas College. Associate degrees in Arts, Science, or Applied Science require a “C” for each course in the major. Graduation GPA includes all Central Texas College grades and grades in transfer courses accepted toward the degree. Students at Central Texas College must achieve a 2.0 cumulative GPA to maintain satisfactory progress toward graduation.

## Probation and Suspension Policies

Students who fail to maintain a 2.0 cumulative GPA during their initial seven semester hours will be notified of unsatisfactory progress and required to participate in an academic counseling session prior to re-enrollment.

### Probation

Students who fail to maintain a 2.0 cumulative grade point average after the first seven semester hours will be placed on academic probation during the next term in which they register. Students who fail to achieve a 2.0 grade point average during any term after the first seven semester hours will be placed on academic probation if their cumulative grade point average is not 2.0 or above. Academic probation will be removed for students who achieve a 2.0 or better grade point average during their term of probation, and whose cumulative grade point average is 2.0 or better. Students who fail to achieve a 2.0 grade point average during their semester of probation will be placed on suspension and cannot register for classes until completion of requirements for returning to class, which are listed below.

### Suspension

Suspension will also be imposed for those students who fail to achieve a 2.0 grade point average during any term (except upon completion of the first seven semester hours, at which time probation will be imposed) if their cumulative grade point average was below 2.0 prior to that semester.

Students on suspension who achieve a 2.0 or better grade point average during their term of suspension, and whose cumulative grade point average is 2.0 or higher, will be removed from suspension. Students on suspension who achieve a 2.0 or better grade point average during their term of suspension, but whose cumulative grade point average is below 2.0, will be placed on probation. Students on suspension who fail to achieve a 2.0 grade point average during their term of suspension will remain on suspension.

A student suspended for the first time may petition Central Texas College to re-enter the next semester. For a student who receives a second suspension, the mandatory suspension period is one sixteen-week semester or two eight-week terms. A third suspension requires the student to remain suspended from Central Texas College for two consecutive sixteen-week semesters or four eight-week terms.



Suspension/probation students who receive financial aid or VA benefits are reported to the Office of Financial Assistance or to the Veterans Administration, and must meet financial aid or VA requirements prior to the reinstatement of their financial aid or VA benefits.

## Returning to Class

Students on probation must sign a probation agreement and receive re-entry advisement.

Students attending Central Texas College who have been suspended may be permitted to re-enter CTC on an individual petition basis. Students granted immediate re-entry must:

- Receive advisement and be recommended, in writing, by the ESO or NCR for return to classes; and
- Complete a re-entry petition agreement and send it with the ESO or NCR recommendation to the Central Texas College Director.

Students who have been suspended once may be re-admitted under petition and must meet academic standards required while on petition re-entry status. Re-entry petitions will be provided to each student at the time of suspension notification.

## Classroom Visitors

Permission to visit a class may be granted by the Campus Dean or designated CTC representative. Such permission carries with it permission to listen and observe, but not to enter into class discussion or laboratory work. Permission to visit is not considered auditing on a full-time basis. Since permission will not be granted to allow small children in class, parents must make arrangements for care of their children during class meetings. CTC policy does not permit a student to audit courses.

# Student Responsibilities

## Address Changes

All correspondence from Central Texas College to the student will be to the address provided on the Application for Admission. Any address changes must be made in writing to the Student Services Records Office. Students are responsible for all communication mailed to the last address on file. The student's academic file will be maintained in Europe or the Pacific Far East for five years after last attendance unless an address change is sent to the appropriate Campus Records Office.

## Name Changes

Individuals must provide their legal name on their Application for Admission because it is the name that will appear on their official student record. To change a legal name to a new legal name, submit a copy of the signed court order showing the authorized new legal name. To change a last name after marriage, a copy of the marriage certificate is required. A female student who wishes to discontinue the use of her married name and resume the use of her maiden name or a different name must present a divorce decree or signed court order showing restoration of the maiden name or other name. Name change documents and affidavits must be submitted to the C&I Records Office on Central Campus. Addresses are located in the front of this Catalog.

## Records Access

In compliance with the Family Educational Rights and Privacy Act of 1974, information classified as "directory information" may be disclosed to the general public without prior written consent from a student, unless the Central Texas College Records Office is notified in writing, by the student, prior to the 4th class day of each term. This statement of non-disclosure will be retained for one year after submission. Release of additional information pertaining to the student record must be authorized in writing by the student.

## Falsification of Records

Students who knowingly falsify Central Texas College records or who knowingly submit any falsified records to CTC are subject to disciplinary action which may include suspension or expulsion from CTC.

## Scholastic Honesty

All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all coursework and during examinations. The following will be considered examples of scholastic dishonesty:

- Plagiarism** Taking of passages from the writing of others without giving proper credit to the sources.
- Collusion** (a) Using another's work as one's own or (b) working together with another person in the preparation of work, unless such joint preparation is specifically approved in advance by the instructor.
- Cheating** Giving or receiving information on examinations.

Students guilty of scholastic dishonesty will be administratively dropped from the course with a grade of "F" and subject to disciplinary action.

## Drug and Alcohol Abuse

You are admitted to Central Texas College for the purpose of educational, social, and personal enhancement. As a student, you have rights and privileges, as prescribed by State and Federal Constitutions, statutes, and policies of the Board of Trustees of the College District. With these rights and privileges, you also have certain duties and responsibilities essential for creating an environment where all students can learn how to live productive, fulfilling lives.

Substance and alcohol abuse disrupts this environment and threatens not only the lives and well being of students, faculty, and staff but also the potential for education, social, and personal enhancement. Therefore, it is important for all members of the Central Texas College community to take responsibility for preventing substance and alcohol abuse.

In recognition of the problems associated with substance and alcohol abuse, Central Texas College has developed a college-wide drug policy. The policy addresses not only disciplinary sanctions associated with substance and alcohol abuse but also education, prevention, intervention, and treatment activities necessary to help eliminate problems that substance and alcohol abuse pose to the college community.

Possession, use, sale, or being under the influence of alcoholic beverages or having alcoholic beverage containers in any Central Texas College owned facility or at any CTC-sponsored event is prohibited except when specifically designated by the Board of Trustees of Central Texas College.

Central Texas College is committed to providing comprehensive drug education and prevention programs as well as early intervention and referral services. In support of this commitment, Central Texas College has established the Substance Abuse Resource Center in the Student Services Building on the Central Campus to provide information and assistance to the college community. Through this program, Central Texas College will provide educational support programs which will assist in activities to prevent alcohol and substance abuse. Information relating to drug and alcohol abuse at Central Texas College locations outside of Texas will be provided at individual campus sites.

To ensure compliance with applicable institutional, state, and federal guidelines relating to the illegal use of illicit drugs and the abuse of alcohol, Central Texas College annually distributes an information flyer to all employees and students which addresses standards of conduct, counseling options, legal sanctions, disciplinary action, and health risks.

For further information, contact the Substance Abuse Resource Center or the Central Texas College Site Representative.

## **Class Behavior**

Generally, students attending Central Texas College are in class for intense personal and professional reasons. To facilitate instruction and learning, you are expected to maintain a mature, earnest and interested attitude in the classroom. CTC will not tolerate student behavior that disrupts the class or attempts to discredit the instructor, the course material or other students. Students who seek to disrupt classes or discredit the course or other students will be asked to cease such disruptions. If the student fails to do so, the student will be dropped from the class with a grade of "F."

## **Student Discipline**

Students are admitted to Central Texas College for the purpose of educational, social, and personal enhancement. As students, they have rights, privileges, duties, and responsibilities, as prescribed by State and Federal Constitutions and statutes and policies of the Board of Trustees of the Institution.

For those few students who fail to understand and accept their role in an educational institution, Central Texas College has prescribed procedures for counseling and disciplinary action which are designed to help the students in every way possible. In essence, the disciplinary procedures are a part of the learning process for students, and students will be suspended or expelled from Central Texas College only if they fail to respond positively to disciplinary procedures.

Disciplinary action may be an oral or written reprimand, disciplinary probation, suspension, or expulsion from Central Texas College. Students on disciplinary probation may receive no honors from Central Texas College. The probation status is permanent unless the student has earned the privilege of being released from disciplinary probation.

Request further information concerning disciplinary procedures from Central Texas College personnel.

# ertificate and Degree Requirements

## Degrees Offered

Central Texas College confers the Associate in Arts, the Associate in Science, the Associate in Applied Science, or the Associate in General Studies degrees upon students who have successfully completed all the minimum and specific requirements for graduation. The minimum requirements for each degree are listed below. To earn a degree, students must also complete the specific degree requirements in the curriculum plan for their major field of study as shown in the programs of study. Except for the Associate in General Studies degree, students may not use the minimum requirements to “tailor” their own degrees. It is the student’s responsibility to apply for the degree. Each degree candidate must earn a minimum of 25% of coursework in traditional study at Central Texas College. No designation of a program discipline will be written on the face of any Central Texas College degree or certificate. Students on financial or academic hold are not eligible for graduation.

A person may initially be awarded one degree from Central Texas College. Students wishing to be awarded a second degree must satisfy all requirements for the second degree, including at least 12 additional semester hours of traditional courses in residence at Central Texas College after degree requirements have been met. This requirement is in addition to those requirements already completed for the award of the first degree. The Associate in General Studies Degree may not be awarded more than once to any student.

## Developmental Studies

The developmental studies courses offered by Central Texas College are designed to provide a means for students to remove specific deficiencies or provide refresher coursework before enrolling in academic, occupational, or technical programs.

Students on academic probation or suspension may be required to complete developmental studies courses to satisfy probation or suspension re-admission requirements.

Developmental studies courses may not be used to satisfy degree requirements and cannot be counted in the grade point average at Central Texas College.

## Certificates of Completion

A Certificate of Completion will be awarded to students who fulfill the curricular requirements of special courses and programs. Minimum residency requirements are 25% or 16 semester hours, whichever is greater. GPA requirements are the same as degree programs.

## Transferability of Courses

Students are urged to consult the catalog of the institution to which they may transfer for detailed information concerning course transfer. This Catalog should be used by the student as the basis for course planning. Courses taken in Developmental Studies may not satisfy degree requirements at receiving institutions.

# Degree Requirements

## Associate in Arts Degree

Coordinate with the senior college to which you intend to transfer to ensure that the courses you take at Central Texas College will fulfill graduation requirements there. To receive an Associate in Arts degree, complete a minimum of 64 semester hours that must include:

- Twelve semester hours of communications to include:
  - ENGL 1301 and 1302,
  - Three semester hours of ENGL 2322, 2323, 2327, 2328, 2332, or 2333, and
  - Three semester hours of speech;
- Three semester hours of humanities or fine arts (see page 28);
- Three semester hours of mathematics, MATH 1314 or higher;
- HIST 1301 and 1302;
- GOVT 2301 and 2302;
- Eight semester hours of foreign language (1411, 1412 sequence);
- Eight semester hours of natural science (Students at Alaska sites must complete eight semester hours of laboratory natural science.)
- Four semester hours of physical education from activity courses;
- A minimum of three semester hours of computer instruction (see page 28);
- A minimum of 25 percent of semester hours credit earned within the Central Texas College System;
- All required courses in the major as listed in this Catalog;
- Satisfy:
  - A minimum overall grade point average of 2.0 ("C" average),
  - A minimum of "C" on each course in the major,
  - A minimum of 2.0 ("C") with Central Texas College, and
- Meeting all other Central Texas College and departmental requirements.

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts degree requirements when approved by the appropriate Central Texas College official.

## Associate In Science Degree

Coordinate with the senior college to which you intend to transfer to ensure that the courses you take at Central Texas College will fulfill graduation requirements there. To receive an Associate in Science degree, complete a minimum of 64 semester hours that must include:

- Twelve semester hours of communications to include:
  - ENGL 1301 and 1302,
  - Three semester hours of ENGL 2322, 2323, 2327, 2328, 2332, or 2333, and
  - Three semester hours of speech;
- Three semester hours of humanities or fine arts (see page 28);
- HIST 1301 and 1302;
- GOVT 2301 and 2302;
- Twelve semester hours of laboratory science (I and II sequence);
- A minimum of three semester hours of computer instruction (see page 28);
- Six semester hours of mathematics, MATH 1314 or higher;
- Four semester hours of physical education from activity courses;
- A minimum of 25 percent of semester hours credit earned within the Central Texas College System;
- All required courses in the major as listed in this Catalog;
- Satisfy:
  - A minimum overall grade point average of 2.0 ("C" average),
  - A minimum of "C" on each course in the major,
  - A minimum of 2.0 ("C") with Central Texas College, and
- Meeting all other Central Texas College and departmental requirements.

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Science degree requirements when approved by the appropriate Central Texas College official.

## Associate In General Studies Degree

Coordinate with the senior college to which you intend to transfer to ensure that the courses you take at Central Texas College will fulfill graduation requirements there. To receive an Associate in General Studies degree, complete a minimum of 64 semester hours that must include:

- Communications to include either:
  - ENGL 1301 and three semester hours of oral communications, or
  - ENGL 1312;
- Three semester hours of humanities or fine arts (see page 28);
- Three semester hours of mathematics, MATH 1314 or higher
- HIST 1301 and 1302;
- GOVT 2301 and 2302;
- Three semester hours of computer instruction (see page 28);
- Two semester hours of physical education from activity courses;
- If the major is Commercial Art, all required courses in the major as listed in the CTC Catalog must be completed;
- A minimum of 25 percent of semester hours credit earned within the Central Texas College System;
- A minimum overall grade point average of 2.0 ("C" average) to include a minimum 2.0 on all courses taken with CTC;
- Meeting all other Central Texas College and departmental requirements; and
- Students in Alaska must complete a minimum of four semester hours of a laboratory science.

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in General Studies degree requirements when approved by the appropriate Central Texas College official.

## Associate In Applied Science Degree

Complete the specific degree requirements in the degree plan for your major as shown in the program of study. The degrees consist of a minimum of 64 semester hours and will include:

- Communications to include either:
  - ENGL 1301 and three semester hours of oral communications, or
  - ENGL 1312;
- Three semester hours of humanities or fine arts (see page 28);
- Three semester hours of mathematics, MATH 1314 or higher, except for the Associate Degree Nursing program;
- Three semester hours of social or behavioral science (see page 28);
- Three semester hours of computer instruction (see page 28);
- A minimum of 36 semester hours of technical courses in the major or a closely related field;
- A minimum of 25 percent of semester hours credit earned within the Central Texas College System;
- All required courses in the major as listed in the CTC Catalog;
- Satisfy:
  - A minimum overall grade point average of 2.0 ("C" average),
  - A minimum of "C" on each course in the major,
  - A minimum of 2.0 ("C") with Central Texas College;
- Meeting all other Central Texas College and departmental requirements; and
- Students in Alaska must complete a minimum of four semester hours of a laboratory science as an elective or in addition to the degree requirements listed above.



Students may be required to repeat major courses in their field of study if graduation is not accomplished within seven years after courses are completed.

# Graduation

## Application for Certificate or Degree

Central Texas College awards certificates and degrees each year in May, August, and December. A request for certificate or degree must be accompanied by the appropriate non-refundable fee and must be submitted to the Central Texas College Site Director by the following dates:

	<b>Deadline</b>
Fall Semester for December Graduation	October 1st
Spring Semester for May Graduation	February 1st
Summer Semester for August Graduation	June 10th

All Central Texas College entrance and course requirements must be completed prior to certificate or degree award. Requests for certificates or degrees received from students who have not completed course requirements and who are not enrolled in the remaining courses by the date specified above will not be processed. Official transcripts and/or GED scores from previously attended institutions, if applicable, must be on file in the Central Texas College Records Office by the above dates.

Any student who fails to meet the above listed graduation deadlines will be processed in the next available degree order time frame. No student will be denied a graduation application. The graduation date on the certificate or degree must conform with the dates listed above.

Students applying for graduation who do not complete degree requirements on or about the graduation date will be declared a non-graduate and will not be eligible for graduation fee reimbursement. Students declared non-graduates will be required to reapply for graduation and pay an additional graduation processing fee.

## Semester Hour Certificates of Award

Since the duties of military personnel and many other students normally prohibit them from achieving full-time student status, CTC provides indicators of progress toward the Associate Degree in the form of certificates. They may file for a Certificate of Award after both 15 and 30 semester hours have been completed. The certificate indicates skills obtained by the student through courses as outlined in the program chosen by the student.

The student is eligible to receive the 15 hour Certificate of Award upon completion of 15 semester hours of credit in one program area. (Nine of these hours must be taken with Central Texas College by traditional classroom methods including video study.) An additional 15 semester hours of credit in the same program area of study will qualify the student for the 30-hour Certificate of Award. To receive the certificate, the student must have a minimum 2.0 GPA.

## Replacing a Lost Certificate or Degree

If a certificate or degree has been lost, stolen, or damaged, a replacement may be obtained. An appropriate fee is required.

## Commencement

Central Texas College holds one consolidated graduation exercise annually at the end of the Spring semester at the Central Campus. Some sites also conduct an annual graduation ceremony in conjunction and coordination with the local military authorities and/or other local schools. Degrees and certificates will be awarded three times a year for students who are unable to attend the annual graduation exercise.

## Graduation With Honors

Candidates for degrees for Central Texas College may graduate with highest honors or honors based on the following criteria:

- To graduate with honors, a candidate must have a 3.5 grade point average on a 4.0 scale with no grades below "B" on all coursework taken. In computing the candidate's grade point average for honors, the grades in all college-level courses taken at Central Texas College as well as courses transferred from other regionally accredited institutions of higher learning are included. A repeated course will not clear the graduate for honors; however, the GPA will reflect only the repeated course in the final GPA.
- In any graduating class, the student(s) with the highest grade point average and who meets all other requirements above will be designated as graduating with highest honors.
- Public recognition for graduating with honors or highest honors is conferred only when the student participates in the formal commencement ceremony.
- To qualify for honors, students must have earned a minimum of 30 semester hours of traditional study with Central Texas College.

# Programs of Study

## Program Listings

Program requirements to earn a degree are listed alphabetically and are followed by course descriptions listed in numerical order.

Although academic counseling is available, it remains your responsibility to determine the major area of study, the senior college or university to which to transfer, and the required courses and their prerequisites.

## Program and Course Availability

Courses are offered to students at military installations that have sufficient student interest. However, not all courses are available every term because of the specialized nature of the courses, equipment requirements, and/or faculty availability.

Student needs and interests are major factors considered in scheduling courses. Express your requirements to your local ESO or NCR. This will assist in scheduling courses that will help the majority of students pursuing a program of study. The Central Texas College representative can furnish convenient planning brochures for most programs.

## Prerequisite Courses

Be familiar with the course descriptions. If the course description indicates a prerequisite, that prerequisite should be satisfied prior to registering for the desired course.

Example: ENGL 1302 - Composition and Rhetoric II requires that ENGL 1301 Composition and Rhetoric I be successfully completed prior to registering for ENGL 1302.

If you are unable to schedule prerequisites, obtain prior approval to enroll in these courses from the appropriate Central Texas College official. Failure to obtain approval could result in loss of credit toward the degree.

## Semester Credit Hours

The three numbers following (to the right of) the course title indicate: (a) the hours per week the class meets for lectures, (b) the number of laboratory hours required per week and (c) the credit hours awarded for successful completion of the course. One semester hour of credit represents one hour of lecture time per week for 16 weeks; one semester hour of credit also represents two to four hours of laboratory time per week for 16 weeks. Lecture and lab proportions may vary depending on the nature of the course.

For example, ATBR 1403, Roughing and Alignment I, 3-3-4, has three hours of lecture per week conducted over 16 weeks and three hours of laboratory per week conducted over 16 weeks with four hours of credit awarded for successful completion. This weekly requirement is adjusted to compensate for terms/sessions/semesters with lengths other than 16 weeks. For instance, 3-0-3 for an eight-week term would require six hours of lecture per week, and 2-4-3 would require four hours of lecture and eight hours of lab per week.

## Technical Electives

Technical electives are courses designed to strengthen the major area of the student's program.

## Approved Electives

Approved electives are courses that, although not specifically related to the major, are designed to broaden the student's exposure to various disciplines considered supportive of the program's objectives.

## Special Electives

Many programs of study have Humanities/Fine Arts and Social/Behavioral Science elective courses that can be used to satisfy elective requirements. Some courses can be used as either a Humanities/Fine Arts or Social/Behavioral Science elective as stated below. The special electives are listed below.

### Humanities/Fine Arts Electives

ANTH 2351	Cultural Anthropology
ARTS	(all ARTS courses except ARTS 2313, 2314)
DANC 2304	Dance Appreciation
DRAM 2366	Motion Picture Art
Foreign Language courses	
GEOG 1302	Cultural Geography
GEOG 1303	World Regional Geography
HIST 2311 and 2312	Survey of Western Civilization I and II
HIST 2381	African-American History
HUMA 1315	Introduction to Fine Arts
Music courses (MUSI)	
Literature courses to include ENGL 1302 when it is not used to satisfy the English requirement	
Philosophy courses to include Religion (PHIL)	
SPCH 2341	Performance of Literature

### Social/Behavioral Science Electives

AGRI 2317	Introduction to Agriculture Economics
ANTH 2301	Physical Anthropology
ANTH 2351	Cultural Anthropology
ECON 2301	Macroeconomics
ECON 2302	Microeconomics
CRIJ 1307	Crime in America
Geography courses (except GEOG 1302 and 1303)	
Government courses (GOVT)	
History courses (HIST)	
Psychology courses (PSYC)	
Sociology courses (SOCI)	

### Computer Science/Microcomputer Technology Electives

Computer Science courses (COSC)	
Microcomputer Technology courses (MISC)	
Word Processing courses (WOPO)	
AGRI 1309	Computers in Agriculture
CMET 1403	Computer Systems & Operational Programming
CMET 2402	Computer Circuit Analysis
CMET 2411	Theory of Interface Devices
DRDS 2410	Computer-Aided Drafting I
DRDS 2411	Computer-Aided Drafting II
FRMG 2309	Computers in Agriculture
HMCA 2302	Hospitality Industry Computer Systems

## Distance Learning

Central Texas College offers college-level distance learning courses in a variety of instructional formats. Distance learning courses may be telecourses, video conference courses, multimedia courses, or on-line courses. Students have direct and continuous access to their instructor, opportunities to collaborate with other students, and full access to library and support services.

**Voice mail** allows direct communication with the instructor and telephone conferencing with the instructor and classmates. Students may practice oral language skills or participate in structured discussions.

**E-mail** fosters direct, frequent and precise communication between the student, instructor, and other students. E-mail can be used to send completed assignments, for electronic discussions, and for seeking answers to questions.

The distant learner can use the library at CTC by visiting the Oveta Culp Hobby Library on the Central Campus, sending e-mail requests to the library, or submitting requests by phone or fax.

The distance education faculty provide their students with phone numbers and e-mail addresses during the orientation sessions.

### To Be Successful

Before enrolling in a distance learning courses, students should consider their course needs, learning styles, and learning preferences. The distant learner must be self-motivated, goal-oriented, and able to work independently.

You can do well in distance learning courses if:

- you are self-disciplined, like to set your own schedule, and enjoy working on your own.
- you have a compelling reason to take the course, such as your work schedule preventing you from enrolling in a traditional course.
- you are comfortable with written instructions because most distance learning courses rely on printed materials and written directions rather than in-person explanations from the instructor.
- you don't need the continuous face-to-face interaction with your instructor and classmates to be successful.
- you need to save time in commuting because distance learning courses require just as much time "learning time" and "study time" as campus courses.
- you are comfortable with technology because most distance learning courses use technology for teaching and communication (i.e., e-mail, voice mail, fax machines).

### Telecourses

A telecourse uses broadcast television or videotapes to enhance the course with images not easily conveyed in a printed format. Students view simulations, demonstrations, or artifacts to increase understanding of the subject. Students communicate with their instructor through voice mail and/or e-mail.

### Video Conference Courses

In a video conference course, the distant learner has two-way audio and two-way video interaction with the instructor and other students through a video conferencing system. This delivery system allows for instructor-delivered lectures, in-depth discussions, question/answer sessions, and demonstrations—just like in a traditional classroom. Students communicate with their instructor and peers directly in the class.

### Multimedia Courses

Multimedia courses use textbooks, CD-ROM, computer software, and/or videotapes along with curricular materials to guide the student in learning. Students choose the media most suitable for their learning styles and most accessible for their learning environments. Students communicate with their instructors using voice mail or e-mail and collaborate with other students using e-mail or discussion sessions.

### On-line Courses

On-line courses use the Internet as the primary delivery system for instruction. Course materials (guides, syllabi, reading lists, and lecture notes) are posted on the Internet for students use. Additionally, students communicate with faculty and students and access instructional resources through the Internet. Orientation and review sessions may be done in person or via the Internet.

## **Continuing Education Program**

The purpose of non-credit programs is to meet the current and changing educational requirements of a specific community. To achieve this purpose, instruction is provided in response to expressed needs. Classes generally provide training for the individual. However, special interest groups can also be accommodated within the scope and philosophy of the program. Classes are geared to the changing needs and requirements of the area being served. There are no limits to the number or variety of courses. Classes are offered in the vocational business fields as well as practical arts. Non-credit courses are offered in the following:

### **Business Education**

Classes offered in business are the result of close and constant cooperation with, and are established on the basis of specific requirements from area agencies such as Board of Realtors and Civilian Personnel Offices. The business courses, including secretarial and clerical courses, are developed to provide adult students pre-employment and in-service training in knowledge and skills to meet occupational requirements of employers.

### **Self Development Education**

Classes offered in this group are designed for persons who wish to learn a new language, hobby or skill and who derive self-satisfaction from learning and performing in new subjects.

### **Special Requests**

Other non-credit courses may be arranged to meet specific requests from interested groups. Central Texas College and its affiliated organizations are able to provide assistance for virtually every educational requirement.

# Accounting Technology

## Associate in Applied Science Degree

### First Year

First Semester			Credit
ACTE	1301	Principles of Accounting I	3
<u>BUSI</u>	<u>1301</u>	Introduction to Business	3
<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
COSC	1300	Computer Information Processing	3
or			
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1

### Second Semester

ACTE	1302	Principles of Accounting II	3
ELCT*		Elective	3
MGMT	1305	Introduction to Management	3
MGMT	1309	Income Tax	3
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
PHED		Physical Education	1

### Second Year

First Semester			
ACTE	2309	Fundamentals of Accounting III	3
MGMT	2305	Business Law I	3
ACTE	2305	Basics of Managerial Accounting	3
ACTE	2311	Accounting and Financial Information Systems I	3
ELCT*		Humanities/Fine Arts Selection	3
PHED		Physical Education	1

### Second Semester

ACTE	2310	Fundamentals of Accounting IV	3
MGMT	2306	Business Law II	3
ACTE**		Elective	3
<u>ENGL</u>	<u>2311</u>	Technical Writing	3
ELCT*		Social/Behavioral Science Selection	3
PHED		Physical Education	1
<b>Total Hours</b>			<b>64-65</b>

\* Electives: ECON 2301, 2302; MGMT 1304, 1306, 1307, 2301, 2302; OADM 1309, or 2307.

\*\* Accounting Electives: ACTE 2306, ACTE 2312.

\* Humanities/Fine Arts Selection. See Page 28.

\* Social/Behavioral Science Selection. See Page 28.

# Administrative Secretarial

## Associate in Applied Science Degree

### First Year

First Semester			Credit
OADM*	1301	Beginning Shorthand	3
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	1305	Information and Records Management	3
OADM	1309	Business Mathematics and Calculating Machines	3
<u>ENGL</u>		English Selection	3
WOPO	1101	MS-DOS: An Introduction	1

### Second Semester

WOPO*	1304	Intermediate Information Processing	3
OADM	1306	Office Procedures and Applications	3
OADM*	1302	Intermediate Shorthand	3
OADM	1308	Business Correspondence	3
WOPO	1307	Word Processing/Transcript	3
PHED		Physical Education	1

### Second Year

First Semester			
WOPO***	2303	Office Automation	3
<u>MATH</u>	<u>1324, 1342, or 1314</u>		3
OADM	2304	Office Accounting I	3
ELCT**		Elective	3
ELCT**		OADM/WOPO Selection	3-4

### Second Semester

WOPO	2302	Advanced Information Processing Applications	3
OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Management	3
<u>SPCH</u>	<u>1315 or 1321</u>		3
ELCT*		Humanities/Fine Arts Selection	3
ELCT*		Social/Behavioral Science Selection	3
<b>Total Hours</b>			<b>65-66</b>

- \* Levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests.
- \*\* Electives or selections approved by Department Chair. Courses may be chosen leading toward general, medical, or legal secretarial programs upon department approval.
- \*\*\* WOPO 1305 may be substituted.
  - Humanities/Fine Arts Selection. See Page 28.
  - Social/Behavioral Science Selection. See Page 28.

## Certificate of Completion

### General Office Assistant

Student may apply for a Certificate of Completion upon satisfactory completion of all the following courses: OADM 1305, 1306, 1308, 1309, 2304, 2305, 2307; WOPO 1101, 1303, 1304, and 1307.

### General Secretarial

Student may apply for a Certificate of Completion, General Secretarial, upon satisfactory completion of all courses listed in the first year.

# Air Conditioning & Refrigeration

## Associate in Applied Science Degree

### First Year

First Semester			Credit
AIRC	1400	Basic Air Conditioning and Refrigeration Theory	4
AIRC	1401	Electricity for Air Conditioning and Refrigeration I	4
AIRC	1403	Heating Systems	4
<u>MATH</u>		<u>MATH 1324, 1342, 1314</u> or higher	3
<u>PHED</u>		Physical Education	1

### Second Semester

AIRC	1406	Electricity for Air Conditioning and Refrigeration II	4
AIRC	1407	Mechanical Refrigeration Systems	4
ELCT*		Computer Science/Microcomputer Technology Selection	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3

### Second Year

First Semester			
AIRC	2400	Electricity for Air Conditioning and Refrigeration III	4
AIRC	2401	Advanced Air Conditioning and Refrigeration Theory	4
AIRC	2405	Heat Pumps I	4
AIRC	2403	Commercial Air Conditioning Systems	4
Second Semester			
AIRC	2402	Commercial Refrigeration	4
AIRC	2404	Troubleshooting Air Conditioning and Refrigeration Systems	4
ELCT*		Humanities/Fine Arts Selection	3
AIRC	2407	Heat Pumps II	4
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
<b>Total Hours</b>			<b>67</b>

- \* Humanities/Fine Arts Selection. See Page 28.
- \* Computer Science/Microcomputer Technology Selection. See Page 28.

### Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all AIRC prefix courses.

# Applied Management

## Associate in Applied Science Degree

### First Year

First Semester		Credit
<u>BUSI</u> <u>1301</u>	Introduction to Business	3
ENGL*	English Selection	3
<u>MATH</u>	<u>MATH 1324, 1342, 1314</u> or higher	3
MGMT    1305	Introduction to Management	3
MGMT    1306	Human Relations	3
PHED	Physical Education	1

### Second Semester

<u>BUSI</u> <u>1307</u>	Personal Finance	3
ENGL*	English Selection	3
MGMT**	Management Selection	3
SPCH*	Speech Selection	3
ELCT♦	Computer Science/Microcomputer Technology Selection	3
PHED	Physical Education	1

### Second Year

First Semester		
<u>ACCT***</u> <u>2301</u>	Principles of Accounting I	3
MGMT    2302	Human Resource Management	3
MGMT    2309	Supervision	3
ELCT*	Humanities/Fine Arts Selection	3
MGMT**	Management Selection	3
PHED	Physical Education	1

### Second Semester

ELCT■	Social/Behavioral Science Selection	3
MGMT*4 2303	Law and Legal Assistance	3
MGMT    2310	Personnel Counseling	3
MGMT**	Sophomore Management Selection	3
MGMT**	Sophomore Management Selection	3
PHED	Physical Education	1
<b>Total Hours</b>		<b>64</b>

\* ENGL 1301, 1302, 1312, 2311; SPCH 1315, 1321.

\*\* MGMT 1158, 1301, 1302, 1303, 1304, 1307, 1308, 1309, 1381, 1382, 1383, 1384, 1385, 1386, 2101, 2151, 2152, 2161, 2162, 2164, 2300, 2301, 2304, 2305, 2306, 2307, 2312, 2314, 2315, 2351, 2354, 2381, 2382, 2383, 2384, 2385, 2386; COSC 1300, 1403, 1405; OADM 1308, 2307; PSYC 2301; REAE 1301, 2304, or 2305.

\*\*\* ACCT 2301 may be substituted with OADM 2304 or HMCA 2306.

\*4 MGMT 2303 may be substituted with MGMT 2305, REAE 2305 or LEGA 2302.

- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# Applied Management

## Computer Applications

### Associate in Applied Science Degree

#### First Year

First Semester			Credit
MGMT	1305	Introduction to Management	3
ELCT *		Computer/Microcomputer Elective	4
MISC	1450	Microcomputers for Business	4
<u>ENGL</u>	<u>1312</u>	Communications Skills	3
<u>MATH</u>		<u>MATH 1324 or 1342</u>	3
PHED		Physical Education	1

#### Second Semester

MGMT	1301	Organization and Management	3
MGMT	1304	Work Organization	3
MISC	1430	Spreadsheets for Microcomputers	4
MISC	1440	Data Base for Microcomputers	4
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
PHED		Physical Education	1

#### Second Year

First Semester			
MGMT	2305	Business Law I	3
MGMT	2302	Human Resource Management	3
<u>ACCT</u>	<u>2301</u>	Principles of Accounting I	3
MISC	1461	Operating Systems	4
MISC	2402	Systems in the MIS Environment	4

Second Semester			
MGMT	1306	Human Relations	3
ELCT*		Computer/Microcomputer Elective	4
<u>ACCT</u>	<u>2302</u>	Principles of Accounting II	3
ELCT*		Humanities/Fine Arts Selection	3
ELCT■		Social/Behavioral Science Selection	3
<b>Total Hours</b>			<b>69</b>

- \* Any MISC or COSC course for which prerequisites are completed.
- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

# Art

## Associate in Arts Degree

This is a suggested curriculum.

### First Year

#### First Semester

		Credit
<u>ARTS</u>	Two courses from <u>ARTS 1303, 1311, 1316 and 2323</u>	6
<u>ENGL</u> <u>1301</u>	Composition and Rhetoric I	3
<u>HIST</u> <u>1301</u>	History of the U.S. to 1877	3
<u>LANG*</u> <u>1411</u>	Beginning Foreign Language	4
<u>PHED</u>	Physical Education	1

#### Second Semester

<u>ARTS</u>	Two courses from <u>ARTS 1304, 1312, 1317, and 2324</u>	6
<u>ENGL</u> <u>1302</u>	Composition and Rhetoric II	3
<u>HIST</u> <u>1302</u>	History of the U.S. from 1877	3
<u>LANG*</u> <u>1412</u>	Foreign Language	4
<u>PHED</u>	Physical Education	1

### Second Year

#### First Semester

<u>ARTS</u>	One course, sophomore level	3
<u>ENGL</u>	<u>ENGL 2322, 2323, 2327, 2328, or 2332</u>	3
<u>SCIE**</u>	Physical/Life Science	4
<u>MATH</u>	<u>MATH 1324, 1342, 1314 or higher</u>	3
<u>GOVT</u> <u>2301</u>	State and Federal Government I	3
<u>PHED</u>	Physical Education	1

#### Second Semester

<u>ARTS</u>	One course, sophomore level	3
<u>SPCH</u>	<u>SPCH 1318, 1321, or 2341</u>	3
<u>SCIE**</u>	Physical/Life Science	4
<u>ELCT*</u>	Computer Science/Microcomputer Technology Selection	4
<u>GOVT</u> <u>2302</u>	State and Federal Government II	3
<u>PHED</u>	Physical Education	1

**Total Hours** **69**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

\* LANG: See course selections under GERM, SPAN, FREN, and JAPN. If German is taken the first year, beginning French or Spanish may be taken the second year.

\*\* SCIE: See course selections under BIOL, CHEM, GEOL, PHYS.

♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# Art

## Certificate of Completion

### First Year

First Semester		Credit
<u>HIST</u>	<u>1301</u> History of the U.S. to 1877	3
SPCH	SPCH Selection	3
GOVT	2301 State and Federal Government I	3
ELCT*	MATH, ENGL, SCIE or LANG	6-8
PHED	Physical Education	1

### Second Semester

ELCT	Elective Selections	14-15
ELCT•	Humanities/Fine Arts Selection	3
ELCT♦	Computer Science/Microcomputer Technology Selection	4
PHED	Physical Education	1
<b>Total Hours</b>		<b>38-41</b>

- \* See course selections under BIOL, CHEM, GEOL or PHYS for SCIE elective selections. See course selections under FREN, GERM, JAPN or SPAN for LANG elective selections.
- Humanities/Fine Arts Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# Automotive Body Repair

## Associate in Applied Science Degree

### First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
ATBR	1403	Roughing and Alignment I	4
ATBR	1405	Auto Body Welding I	4
ATBR	1407	Auto Body Fundamentals	4
ELCT		Free Elective	1

### Second Semester

ATBR	1408	Roughing and Alignment II	4
ATBR	1409	Auto Body Welding II	4
ATBR	1410	Auto Body Painting Fundamentals	4
ATBR	1411	Automotive Glass	4
<u>MATH</u>		<u>MATH 1324, 1342, 1314 or higher</u>	3

### Second Year

#### First Semester

ELCT*		Humanities/Fine Arts Selection	3
ATBR	2406	Frame Repair and Alignment	4
AUTO	2405	Steering and Suspension Systems	4
<u>ENGL</u>	<u>1312</u>	Communications Skills	3
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3

#### Second Semester

ATBR	2400	Major Vehicle Damage Repair	4
ATBR	2404	Advanced Auto Body Painting	4
ELCT*		Computer Science/Microcomputer Technology Selection	4
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
ATBR	2401	Panel Repair and Replacement	4
<b>Total Hours</b>			<b>72</b>

- \* Humanities/Fine Arts Selection. See Page 28.
- \* Computer Science/Microcomputer Technology Selection. See Page 28.

### Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all ATBR, AUTO, and INDU prefix courses.  
( Student must complete ATBR 2401 )

# Automotive Service and Repair

## Associate in Applied Science Degree

### First Year

First Semester			Credit
AUTO	1400	Shop Fundamentals	4
AUTO	1301	Automotive Systems	3
AUTO	1402	Basic Electrical and Test Equipment	4
MATH		MATH 1324, 1342, 1314 or higher	3
SPCH	1321	Business and Professional Speaking	3

### Second Semester

AUTO	1411	Automotive Computer Systems	4
AUTO	1405	Automotive Air Conditioning	4
AUTO	1407	Brake Systems	4
AUTO	1408	Standard Transmissions and Transaxles	4
ENGL	1312	Communications Skills	3

### Second Year

First Semester			
AUTO	2404	Ignition, Starting and Charging	4
AUTO	2405	Steering and Suspension Systems	4
ELCT♦		Computer Science/Microcomputer Technology Selection	3
AUTO	2410	Fuel Systems and Injection	4
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
Second Semester			
AUTO	2403	Automatic Transmissions and Transaxles	4
AUTO	2406	Engine Diagnosis and Emission	4
ELCT		Elective	3
ELCT*		Humanities/Fine Arts Selection	3
AUTO	2408	Advanced Engine Service	4
Total Hours			72

- \* Humanities/Fine Arts Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

### Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of the following courses: AUTO 1400, 1402, 1405, 1407, 1408, 2404, 2406, and 2410.

# Aviation Maintenance Technology

## Associate in Applied Science Degree

### First Year

First Semester			Credit
AVMT	1201	Maintenance Publications-G	2
AVMT	1202	Weight and Balance-G	2
AVMT	1305	Basic Aircraft Electricity-G	3
ENGL	1312	Communications Skills	3
PHYS	1305	Survey of Physics	3

### Second Semester

AVMT	1203	Aircraft Drafting-G	2
AVMT	1204	Airframe Materials and Corrosion Controls-G	2
AVMT	1306	Aircraft Finishes-A	3
AVMT	1402	Sheet Metal Structures-A	4
AVMT	2303	Airframe Inspection-A	3
MATH	MATH 1324, 1342, 1314 or higher		3

### Third Semester

AVMT	2304	Aircraft Fuel Systems-A	3
AVMT	2402	Hydraulics and Pneumatics-A	4

### Second Year

First Semester			
AVMT	2305	Aircraft Instrument Systems-A	3
AVMT	2306	Engine Electrical Systems-P	3
AVMT	2307	Engine Lubrication and Cooling Systems-P	3
AVMT	2403	Aircraft Electrical Systems-A	4

### Second Semester

AVMT	2404	Powerplant Maintenance Reciprocating Engines-P	4
AVMT	2405	Engine Fuel Systems-P	4
AVMT	2406	Aircraft Propellers-P	4
AVMT	2407	Powerplant Maintenance Turbine Engines-P	4

### Third Semester

ELCT*	Humanities/Fine Arts Selection	3
ELCT*	Social/Behavioral Science Selection	3
<b>Total Hours</b>		<b>72</b>

AVMT courses are designated: G - General, A - Airframe, P - Powerplant.

- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

# Business Administration

## Associate in Arts Degree

This is a suggested curriculum.

### First Year

First Semester		Credit
SCIE***	Physical/Life Science	4
HIST 1301	History of the U.S. to 1877	3
ENGL 1301	Composition and Rhetoric I	3
MATH	MATH 1324, 1342, 1314 or higher	3
PSYC 2301	Introduction to Psychology	3
PHED	Physical Education	1

### Second Semester

SCIE***	Physical/Life Science	4
HIST 1302	History of the U.S. from 1877	3
ENGL 1302	Composition and Rhetoric II	3
BUSI 1301	Introduction to Business	3
ELCT*	Humanities/Fine Arts Selection	3
PHED	Physical Education	1

### Second Year

First Semester		
ECON 2301	Macroeconomics	3
ACCT 2301	Principles of Accounting I	3
ENGL*	English Selection	3
GOVT 2301	State and Federal Government I	3
LANG** 1411	Foreign Language	4
PHED	Physical Education	1

### Second Semester

ACCT 2302	Principles of Accounting II	3
ELCT*	Computer Science/Microcomputer Technology Selection	4
GOVT 2302	State and Federal Government II	3
ECON 2302	Microeconomics	3
SPCH	SPCH 1315 or 1321	3
LANG**1412	Foreign Language	4
PHED	Physical Education	1
<b>Total Hours</b>		<b>72</b>



Senior college course requirements vary; it is the student's responsibility to consult with the four-year institution he/she plans to attend to identify specific requirements.

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* English courses include ENGL 2322, 2323, 2327, 2328, 2332, or 2333.
- \*\* LANG: See course selections under GERM, SPAN, FREN, and JAPN.
- \*\*\* SCIE: See course selections under BIOL, CHEM, GEOL, PHYS
  - Humanities/Fine Arts Selection. See Page 28.
  - Computer Science/Microcomputer Technology Selection. See Page 28.

# Business Management

## Associate in Applied Science Degree

### First Year

First Semester		Credit
MGMT 1306	Human Relations	3
ENGL 1301	Composition and Rhetoric I	3
BUSI 1301	Introduction to Business	3
ELCT	MISC 1450 or WOPO 1305	3-4
SPCH	SPCH 1315 or 1321	3
PHED	Physical Education	1

### Second Semester

MGMT 1304	Work Organization	3
MGMT 1305	Introduction to Management	3
OADM 1309	Business Math and Calculating Machines	3
ELCT	BUSI/MGMT/REAE	3
ELCT	BUSI/MGMT/REAE	3
PHED	Physical Education	1

### Second Year

First Semester		
MATH	MATH 1324 or 1342	3
ACCT* 2301	Principles of Accounting I	3
ELCT	MGMT 1401 or 2316 or REAE 2401	3-4
MGMT 2302	Human Resource Management	3
MGMT 2305	Business Law I	3
ECON	ECON 2301 or 2302	3

### Second Semester

ELCT	MGMT 1402 or 2317 or REAE 2402	3-4
MGMT 1308	Small Business Management	3
ACCT* 2302	Principles of Accounting II	3
MGMT 2309	Supervision	3
ELCT*	Humanities/Fine Arts Selection	3
ELCT	Elective	3
Total Hours		68-71

- \* OADM 2304 and OADM 2305 may be substituted.
- Humanities/Fine Arts Selection. See Page 28.

# Business Management

## Certificate of Completion

First Semester			Credit
BUSI	1301	Introduction to Business	3
MGMT	1305	Introduction to Management	3
MGMT	1306	Human Relations	3
ELCT		MISC 1450 or WOPO 1305	3-4
ELCT		BUSI/MGMT/REAE	3
Second Semester			
MGMT	2302	Human Resource Management	3
MGMT	2309	Supervision	3
ELCT		MGMT 1401/2316 or REAE 2401	3-4
MGMT	2305	Business Law I	3
ELCT		BUSI/MGMT/REAE	3
<b>Total Hours</b>			<b>30-32</b>

# Business Management Entrepreneurship

## Certificate of Completion

First Semester			Credit
MGMT	1308	Small Business Management	3
OADM	1309	Business Math and Calculating Machines	3
ELCT		MISC 1450 or WOPO 1305	3-4
MGMT	2301	Marketing Principles	3
ACCT	2301	Principles of Accounting I	3
Second Semester			
MGMT	2302	Human Resource Management	3
MGMT	2305	Business Law I	3
ELCT		BUSI/MGMT/REAE	3
MGMT	2319	Small Business Accounting	3
MGMT	2321	Entrepreneurship and Business Plan Development	3
<b>Total Hours</b>			<b>30-31</b>

# Communications Electronics Technology

## Associate in Applied Science Degree

### First Year

First Semester			Credit
CMET	1400	Electronics and Computer Skills	4
CMET	1401	Digital Circuits	4
ELTE	1401	Electrical Circuits I	4
CMET	1402	Computer Systems	4

### Second Semester

CMET	1403	Computer Systems and Operational Programming	4
MATH	1314	College Algebra	3
ELTE	1402	Electrical Circuits II	4
ELTE	1403	Solid State Electronics	4
ENGL	1312	Communications Skills	3

### Second Year

First Semester			
CMET	1409	CRT Systems	4
ELTE	1404	Communications Circuits I	4
ELTE	2406	Integrated Devices	4
ELCT*		Social/Behavioral Science Selection	3
ELCT*		Approved Technical Elective	4

### Second Semester

ELTE	2407	Communications Circuit II	4
ELTE	2412	Circuits and Systems	4
ELCT*		Humanities/Fine Arts Selection	3
CMET	2408	Digital Communications	4
ELCT**		Academic Elective	3
<b>Total Hours</b>			<b>71</b>

\* Selected course approved by the Department Chair: CMET 2411, ELTE 2401, 2405, ELTE 2103 & 2303, ELTE 2409, ELTE 2411, and ELTE 2421.

\*\* Elective from one of the following: Agriculture, Art, Business, Communications, Engineering, Mathematics, Music, Science, Social Science.

• Humanities/Fine Arts Selection. See Page 28.

▪ Social Behavioral Science Selection. See Page 28.

# Computer-Aided Drafting and Design

## Associate in Applied Science Degree

### First Year

First Semester			Credit
<u>ENGR*</u>	<u>1304</u>	Engineering Graphics	3
DFTG	2412	Technical Illustration	4
DFTG	2410	Structural Drafting	4
MATH	1314	College Algebra	3

### Second Semester

<u>ENGR*</u>	<u>1305</u>	Descriptive Geometry	3
DFTG	2402	Machine Drafting	4
DFTG	1409	Basic Computer-Aided Drafting	4
<u>ENGL</u>	<u>1312</u>	Communications Skills	3
ELCT		Elective	3

### Second Year

First Semester			
DFTG	1417	Architectural Drafting-Residential	4
DFTG	1458	Electrical/Electronics Drafting	4
DFTG	1452	Intermediate Computer-Aided Drafting	4
ELCT**		Approved Elective	3-4
ELCT*		Humanities/Fine Arts Selection	3

### Second Semester

DFTG	1460	Pipe Drafting	4
DFTG	1464	Topographical Drafting	4
DFTG	1471	Industrial Practice	4
ELCT*		Social/Behavioral Science Selection	3
<b>Total Hours</b>			<b>64-65</b>

- \* **Selected Locations** may substitute DFTG 1405 for ENGR 1304 and DFTG 1456 for ENGR 1305.
- \*\* Approved Electives: DFTG 1391; ARTS 1316; MISC 1450 or other elective approved by the Department Chair.
- \* Humanities/Fine Arts Selection: ANTH 2351, ARTS courses (except ARTS 2313, 2314) LANG courses, GEOG 1302, 1303, HIST 2311, 2312, SPCH 2341, MUSI, PHIL (to include religion) and Literature courses.
- \* Social/Behavioral Science Selection: AGRI 2317, ANTH 2301, 2351, ECON 2301, 2302, CRIJ 1307, HIST, GOVT, PSYC, SOCI, and GEOG, (except GEOG 1301) courses.

## Certificate of Completion

Students may apply for a certificate of completion upon satisfactory completion of ENGR 1304, 1305; DFTG 1409, 2402, 2410, 2412 and TMTH 1301.

# Computer Electronics Technology

## Associate in Applied Science Degree

### First Year

First Semester			Credit
CMET	1400	Electronics and Computer Skills	4
CMET	1401	Digital Circuits	4
ELTE	1401	Electrical Circuits I	4
CMET	1402	Computer Systems	4

### Second Semester

CMET	1403	Computer Systems and Operational Programming	4
<u>MATH</u>	<u>1314</u>	College Algebra	3
ELTE	1402	Electrical Circuits II	4
ELTE	1403	Solid State Electronics	4
<u>ENGL</u>	<u>1312</u>	Communications Skills	3

### Second Year

First Semester			
CMET	1409	CRT Systems	4
CMET	2402	Computer Circuit Analysis	4
CMET	1405	LAN	4
ELTE	2406	Integrated Devices	4
ELCT*		Social/Behavioral Science Selection	3

### Second Semester

CMET	2404	Computer System: Diagnosis and Maintenance	4
ELTE	2412	Circuits and Systems	4
ELCT*		Humanities/Fine Arts Selection	3
ELCT*		Approved Technical Elective	4
ELCT**		Academic Elective	3
<b>Total Hours</b>			<b>71</b>

\* Elective Selection approved by the Department Chair: CMET 1404, CMET 2405, CMET 2406, CMET 2408, ELTE 2103 & 2303, ELTE 2409, ELTE 2411, and ELTE 2421, and CMET 2400 or CMET 2200 and 2201.

\*\* Elective from one of the following: Agriculture, Art, Business, Communications, Engineering, Mathematics, Music, Science, Social Science.

• Humanities/Fine Arts Selection. See Page 28.

▪ Social/Behavioral Science Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of these courses: CMET 1400, 1401, 1403, ELTE 1401, 1402, 1403, ENGL 1312 and one approved elective.

# Criminal Justice

## Associate in Applied Science Degree

### First Year

First Semester			Credit
CRIJ	1301	Introduction to Criminal Justice	3
CRIJ	1304	The Courts and Criminal Procedures	3
CRIJ	1307	Crime in America	3
CRIJ	1308	Fundamentals of Criminal Law	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>PHED</u>	<u>1130</u>	Physical Conditioning	1

### Second Semester

CRIJ	1201	Defensive Tactics	2
CRIJ*		Criminal Justice Option (three courses)	9
ENGL		<u>ENGL 1302 or 2311</u>	3
ELCT		Criminal Justice Elective	3

### Second Year

First Semester			
CRIJ	2101	Emergency Medical Aid	1
CRIJ	2304	Juvenile Procedures	3
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<u>SOCI</u>	<u>1301</u>	Introduction to Sociology	3
<u>MATH</u>		<u>MATH 1324, 1342, 1314 or higher</u>	3
PHED		Physical Education	1
ELCT		Criminal Justice Elective	3

### Second Semester

CRIJ	2201	Firearms	2
PSYC	2301	Introduction to Psychology	3
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
ELCT*		Humanities/Fine Arts Selection	3
ELCT*		Computer Science/Microcomputer Technology Selection	3
ELCT		Elective	3

**Total Hours** **67**

As early as possible, students planning to complete a baccalaureate degree in Criminal Justice/Law Enforcement should declare a major and develop a degree plan which will meet the transfer requirements of the college of their choice.

- \* Criminal Justice Options:
  - Students intending to major in Law Enforcement may take CRIJ 1309, 1302 and 1303.
  - Students intending to major in Corrections may take CRIJ 1306, 1314 and 1309/1302/1303.
  - Students who prefer a more general Criminal Justice curriculum may take any three from CRIJ 1302, 1303, 1306, 1309, 1314, 2307.
- Humanities/Fine Arts Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# Diesel Mechanics

## Associate in Applied Science Degree

### First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
DIEM	1301	Diesel Engine Fundamentals	3
DIEM	1405	Diesel Engine Auxiliary Systems	4
<u>ENGL</u>	<u>1312</u>	Communications Skills	3
ELCT♦		Computer Science/Microcomputer Technology Selection	3

### Second Semester

DIEM	1404	Standard Power Trains	4
DIEM	1406	Diesel Starting and Charging Systems	4
AUTO	1407	Brake Systems	4
<u>MATH</u>		<u>MATH 1324, 1342, 1314 or higher</u>	3
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3

### Second Year

First Semester			
DIEM	2400	Hydraulic Systems Fundamentals and Service	4
DIEM	2406	Diesel Fuel Injection Systems	4
DIEM	2407	Diesel Cylinder Head Service	4
ELCT		Elective	3
ELCT♦		Humanities/Fine Arts Selection	3

### Second Semester

DIEM	2404	Automatic Power Train	4
AUTO	2405	Steering and Suspension Systems	4
DIEM	2405	Advanced Diesel Engine Service	4
DIEM	2403	Diesel Engine Overhaul	4
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<b>Total Hours</b>			<b>72</b>

- Humanities/Fine Arts Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of ALL DIEM, AUTO, and INDU courses. (Student must complete DIEM 2403.)

# Early Childhood Professions

## Associate in Applied Science Degree

### First Year

#### First Semester

			Credit
CDEC	1311	Introduction to Early Childhood Education	3
CDEC	1313	Curriculum Resources for Early Childhood Professions	3
CDEC	1319	Child Guidance	3
<u>ENGL</u>		<u>ENGL 1301 or 1312</u>	3
CDEC*	1359	Child with Special Needs	3
PHED		Physical Education	1

#### Second Semester

CDEC	1358	Creative Arts for Early Childhood	3
CDEC	1354	Child Growth and Development	3
CDEC	1318	Nutrition, Safety and Health	3
CDEC	1303	Family and the Community	3
CDEC	1356	Emergent Literacy for Early Childhood	3

### Second Year

#### First Semester

CDEC	2321	The Infant and Toddler	3
CDEC	2326	Administration of Programs for Children I	
or			
CDEC	2328	Administration of Programs for Children II	3
ELCT*		Computer Science/Microcomputer Technology Selection	4
<u>SPCH</u>		<u>SPCH 1315 or 1321</u>	3
<u>MATH</u>		<u>MATH 1324, 1342, 1314 or higher</u>	3
CDEC	1374	Preschool Age	3

#### Second Semester

CDEC	1357	Math and Science for Early Childhood	3
CDEC	2384	Cooperative Education in Child Development	3
CDEC	2341	The School Age Child	3
CDEC	1195	Special Topics in Child Care	1
ELCT*		Humanities/Fine Arts Selection	3
ELCT*		Social/Behavioral Science Selection	3
<b>Total Hours</b>			<b>66</b>

\*Humanities/Fine Arts Selection. See Page 28.

\*Social/Behavioral Science Selection. See Page 28.

\*Computer Science/Microcomputer Technology Selection. See Page 28.

\*CDEC 1371 and 1372 may substitute.

## Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all child development courses in the first year and CDEC 1359 and 1371.

# Education

## Associate in Arts Degree

This is a suggested curriculum.

### First Year

First Semester		Credit
<u>ENGL</u>	<u>1301</u> Composition and Rhetoric I	3
<u>HIST</u>	<u>1301</u> History of the U.S. to 1877	3
SCIE**	Physical/Life Science	4
<u>LANG*</u>	<u>1411</u> Foreign Language	4
ELCT* <sup>4</sup>	Elective	3
PHED	Physical Education	1

### Second Semester

<u>ENGL</u>	<u>1302</u> Composition and Rhetoric II	3
<u>HIST</u>	<u>1302</u> History of the U.S. from 1877	3
SCIE**	Physical/Life Science	4
<u>LANG*</u>	<u>1412</u> Foreign Language	4
<u>SPCH</u>	<u>1315</u> Public Speaking	3
PHED	Physical Education	1

### Second Year

First Semester		
ENGL***	English Selection	3
<u>GOVT</u>	<u>2301</u> State and Federal Government I	3
<u>MATH</u>	<u>MATH 1324, 1342, 1314</u> or higher	3
<u>PSYC</u>	<u>2301</u> Introduction to Psychology	3
<u>SOCI</u>	<u>1301</u> Introduction to Sociology	3
PHED	Physical Education	1

### Second Semester

ENGL***	English Selection	3
<u>GOVT</u>	<u>2302</u> State and Federal Government II	3
ELCT* <sup>◆</sup>	Computer Science/Microcomputer Technology Selection	3
ELCT* <sup>4</sup>	Elective	3
ELCT* <sup>4</sup>	Elective	3
PHED	Physical Education	1
<b>Total Hours</b>		<b>68</b>

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* LANG: See course selection under FREN, GERM, SPAN, and JAPN. If German is taken during the first year, Beginning French or Spanish may be taken during the second semester.
- \*\* SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
- \*\*\* English Selection(s) include: ENGL 2322, 2323, 2327, 2328, 2332 or 2333.
- \*<sup>4</sup> Students should check requirements of the institution to which they intend to transfer as requirements may vary. Students should choose electives that support their major.
- ◆ Computer Science/Microcomputer Technology Selection. See Page 28.

# Emergency Medical Technician

## Associate in Applied Science Degree

### First Year

First Semester			Credit
EMET	1402	Emergency Medical Technician-Ambulance	4
ENGL	1301	Composition and Rhetoric I	3
MGMT	1305	Introduction to Management	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1

### Second Semester

MGMT	1306	Human Relations	3
EMET		Technical Elective	3
ELCT*		Computer Science/Microcomputer Technology Selection	3
ELCT*		Humanities/Fine Arts Selection	3
ELCT*		Approved Elective	3
PHED		Physical Education	1

### Second Year

First Semester			
EMET	2101	Introduction to Paramedic	1
EMET	2301	Disaster Planning	3
ACCT**	2301	Principles of Accounting I	3
MGMT	2302	Human Resource Management	3
MGMT	2309	Supervision	3
SPCH		SPCH 1315 or 1321	3

### Second Semester

EMET	2302	Emergency Medical Center Management	3
EMET	2303	Psychology of Emergencies	3
ENGL	2311	Technical Writing	3
ACCT**	2302	Principles of Accounting II	3
ELCT*		Social/Behavioral Science Selection	3
ELCT*		Approved Elective	3
<b>Total Hours</b>			<b>64</b>

### National Registry EMT-Basic exam requirements

Applicant must:

1. Be 18 years of age or older.
2. Successfully complete, within the last two years, a state approved National standard EMT-Basic training program, as developed and promulgated by the US Department of Transportation.

- \* Approved Electives: EMET 1303, 1304, 1305, 1403, PSYC 2301, MGMT 1301 or BIOL 2401.
- \*\* OADM 2304 and 2305 may be substituted.
- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# Emergency Medical Technician

## Certificate of Completion

First Semester			Credit
EMET	1402	Emergency Medical Technician-Ambulance	
or			
EMET	1200	Emergency Medical Technician-Recertification	2-4
ELCT*		Approved Electives	11
Total Hours			13-15

For this certificate, only six hours will be accepted as evaluated credit.

\* Approved Electives: EMET 1302, 1303, 1304, 1305, 2101, 2301, 2302, 2303.

# English

## Associate in Arts

This is a suggested curriculum.

### First Year

First Semester			Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>MATH</u>	<u>1314</u>	College Algebra	3
<u>LANG*</u>	<u>1411</u>	Foreign Language	4
<u>SCIE**</u>		Physical/Life Science	4
<u>HIST</u>	<u>1301</u>	History of the U.S. To 1877	3
<u>PHED</u>		Physical Education	1

### Second Semester

<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>MATH</u>	<u>1316</u>	Trigonometry	3
<u>LANG*</u>	<u>1412</u>	Foreign Language	4
<u>SCIE**</u>		Physical/Life Science	4
<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>PHED</u>		Physical Education	1

### Second Year

First Semester			Credit
<u>ENGL***</u>		English Elective	3
<u>LANG*</u>	<u>2311</u>	Intermediate Foreign Language	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	3
<u>ELCT*</u>		Humanities/Fine Arts Selection	3
<u>PHED</u>		Physical Education	1

### Second Semester

<u>ENGL***</u>		English Elective	3
<u>LANG*</u>	<u>2312</u>	Intermediate Foreign Language	3
<u>MISC</u>	<u>1450</u>	Microcomputers for Business	4
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<u>ELCT</u>		Elective	3
<u>PHED</u>		Physical Education	1

**Total Hours**

**69**

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* LANG: See course selection under FREN, GERM, SPAN, and JAPN.
- \*\* SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
- \*\*\* English electives include: ENGL 2322, 2323, 2327, 2328, 2332, or 2333.
- Humanities/Fine Arts Selection. See Page 28.

# Environmental Science

## Associate in Science Degree

This is a suggested curriculum.

### First Year

#### First Semester

			Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>CHEM</u>	<u>1411</u>	General Chemistry I	4
<u>BIOL</u>	<u>1408</u>	General Biology I	4
<u>MATH</u>	<u>1314</u>	College Algebra	3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3
<u>PHED</u>		Physical Education	1

#### Second Semester

<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>CHEM</u>	<u>1412</u>	General Chemistry II	4
<u>BIOL</u>		BIOL 1409, 1411, or 1413	4
<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>MISC</u>	<u>1450</u>	Microcomputers for Business	4
<u>PHED</u>		Physical Education	1

### Second Year

#### First Semester

<u>GEOL</u>	<u>1403</u>	Physical Geology	4
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	3
<u>ELCT*</u>		Humanities/Fine Arts Selection	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3
<u>PHED</u>		Physical Education	1
<u>ELCT*</u>		Elective	3

#### Second Semester

<u>PHYS</u>	<u>1413</u>	Environmental Science	4
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<u>CHEM</u>	<u>2401</u>	Analytical Chemistry	4
<u>ENGL</u>	<u>2311</u>	Technical Writing	3
<u>PHED</u>		Physical Education	1
<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
<b>Total Hours</b>			<b>72</b>

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* Recommended Electives include MATH 2313, 2314, 1316 and/or 1348, PHYS 1401, 1402, ECON 2301, 2302, COSC 1400 or 1403.
- Humanities/Fine Arts selection: GEOG 1302, 1303, or ANTH 2351.

# Environmental Science Technology

## Certificate of Completion

### First Year

#### First Semester

<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	Credit
<u>CHEM</u>	<u>1411</u>	General Chemistry I	3
<u>BIOL</u>	<u>1408</u>	General Biology I	4
<u>MATH</u>	<u>1314</u>	College Algebra	4
<u>MISC</u>	<u>1450</u>	Microcomputers for Business	3

#### Second Semester

<u>ENGL</u>	<u>2311</u>	Technical Writing	4
<u>CHEM</u>	<u>1412</u>	General Chemistry II	3
<u>BIOL</u>	<u>BIOL 1409 or 1413</u>		4
<u>PHYS</u>	<u>1413</u>	Environmental Science	4

### Second Year

#### First Semester

<u>GEOL</u>	<u>1403</u>	Physical Geology	4
<u>CHEM</u>	<u>1407</u>	Physiological Chemistry	4
<u>BIOL</u>	<u>1411</u>	Botany	4
<u>SPCH</u>	<u>1315</u>	Public Speaking	3

#### Second Semester

<u>ECON</u>	<u>2302</u>	Microeconomics	3
<u>CHEM</u>	<u>2401</u>	Analytical Chemistry	4
<u>BIOL</u>	<u>2421</u>	Microbiology	4
<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
<b>Total Hours</b>			<b>62</b>

# Fire Protection Technology

## Associate in Applied Science Degree

### First Year

#### First Semester

FPRT	1301	Fundamentals of Fire Protection	Credit
FPRT	1303	Fire Protection Systems	3
FPRT	1304	Fire Administration I	3
FPRT*	1307	Fire Service Chemistry I	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
PHED		Physical Education	1

#### Second Semester

FPRT	1302	Fire Prevention	3
FPRT	1305	Fire Administration II	3
FPRT	1308	Fire Service Chemistry II	3
<u>MATH</u>		<u>MATH 1324, 1342, 1314 or higher</u>	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3
PHED		Physical Education	1

### Second Year

#### First Semester

FPRT	2301	Industrial Fire Protection I	3
FPRT	2303	Hazardous Material I	3
FPRT	2305	Building Codes and Construction	3
ELCT*		Humanities/Fine Arts Selection	3
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<u>ENGL</u>	<u>2311</u>	Technical Writing	3

#### Second Semester

FPRT	2302	Industrial Fire Protection II	3
FPRT	2306	Fire and Arson Investigation	3
FPRT	2404	Fire Fighting Tactics and Strategies	4
ELCT*		Computer Science/Microcomputer Technology Selection	3
FPRT**		Elective	3
<b>Total Hours</b>			<b>66</b>

\* CHEM 1406 may be substituted for FPRT 1307.

\*\* FPRT Electives include: FPRT 2304, 2308, 2309, 2310, 2314.

• Humanities/Fine Arts Selection. See Page 28.

♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# General Studies

## Associate in General Studies Degree

Student must have a minimum of 16 semester credit hours within the Central Texas College System.  
This is a suggested curriculum.

### First Year

First Semester		Credit
<u>ENGL</u> 1301	Composition and Rhetoric I	
or		
<u>ENGL</u> 1312	Communications Skills	3
<u>HIST</u> 1301	History of the U.S. to 1877	3
PHED	Physical Education	1
ELCT**	Electives	9

### Second Semester

SPCH*	SPCH Selection	
or		
ELCT*	Elective	3
<u>HIST</u> 1302	History of the U.S. from 1877	3
<u>MATH</u>	<u>MATH 1324, 1342, 1314</u> or higher	3
ELCT**	Electives	4
ELCT♦	Computer Science/Microcomputer Technology Selection	3

### Second Year

First Semester		
<u>GOVT</u> 2301	State and Federal Government I	3
ELCT**	Electives	12
PHED	Physical Education	1
Second Semester		
<u>GOVT</u> 2302	State and Federal Government II	3
ELCT*	Humanities/Fine Arts Selection	3
ELCT**	Electives	10
<b>Total Hours</b>		<b>64</b>

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* If ENGL 1301 is taken, student must complete SPCH requirement. If ENGL 1312 is taken, student may substitute an elective.
- \*\* Students may select 34-37 Semester Credit hours from courses that fulfill the student's educational goals.
  - Humanities/Fine Arts Selection. See Page 28.
  - ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# Geology

## Associate in Science Degree

This is a suggested curriculum.

### First Year

#### First Semester

			Credit
<u>GEOL</u>	<u>1403</u>	Physical Geology	4
<u>MATH*</u>	<u>1316</u>	Trigonometry	3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3
<u>CHEM</u>	<u>1411</u>	General Chemistry I	4
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
PHED		Physical Education	1

#### Second Semester

<u>GEOL</u>	<u>1404</u>	Historical Geology	4
<u>MATH</u>	<u>1348</u>	Analytic Geometry	3
<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>CHEM</u>	<u>1412</u>	General Chemistry II	4
<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
PHED		Physical Education	1

### Second Year

#### First Semester

<u>PHYS</u>	<u>1401</u>	College Physics I	4
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	3
<u>MATH</u>	<u>2313</u>	Calculus I	3
ENGL**		English Elective	3
PHED		Physical Education	1
MISC	1450	Microcomputers for Business	4

#### Second Semester

<u>PHYS</u>	<u>1402</u>	College Physics II	4
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<u>MATH</u>	<u>2314</u>	Calculus II	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3
PHED		Physical Education	1
ELCT*		Humanities/Fine Arts Selection	3
<b>Total Hours</b>			<b>71</b>

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* Students deficient in mathematics must take College Algebra. This course should be taken during the summer term prior to the freshman year.
- \*\* English Electives include: ENGL 2311, 2322, 2323, 2327, 2328, 2332, 2333.
- Humanities/Fine Arts Selection. See Page 28.

# Graphics and Printing

## Certificate of Completion

### First Year

#### First Semester

GRPH	1405	Introduction to Graphic Arts and Printing
GRPH	1471	Basic Camera
GRPH	1409	Press Operations I
GRPH	1474	Preventive Maintenance

#### Credit

4  
4  
4  
4

#### Second Semester

GRPH	1419	Binding and Finishing Operations
GRPH	1422	Electronic Publishing I
GRPH	2436	Prepress Techniques
GRPH	2438	Press Operations II

4  
4  
4  
4  
32

#### Total Hours

# Hospitality Management

## Culinary Arts

### Associate in Applied Science Degree

#### First Year

First Semester			Credit
HMCA	1601	Fundamentals of Food Theory	6
HMCA	1309	Introduction to Hospitality Industry	3
HMCA	1202	Safety and Sanitation	2
HMCA	1207	Menu Planning	2

#### Second Semester

HMCA	1606	Culinary Principles	6
HMCA	1303	Food Purchasing	3
ELCT		Elective	3

#### Third Semester

<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3
MGMT	1306	Human Relations	3
HMCA	1304	Hospitality Law	3

#### Second Year

First Semester			
HMCA	2302	Hospitality Industry Computer System	3
HMCA	2612	Advanced Culinary Arts	6
HMCA	2308	Hospitality Sales	3
PHED		Physical Education	1

#### Second Semester

<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
HMCA	2304	Nutrition for HMCA Professionals	3
HMCA	2301	Management Practice HMCA	3
ELCT <sup>■</sup>		Social/Behavioral Science Selection	3

#### Third Semester

HMCA	2311	Culinary Arts Practicum (Field Experience)	3
HMCA		Elective	3
ELCT <sup>•</sup>		Humanities/Fine Arts Selection	3

**Total Hours** **71**

- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

## Certificate of Completion

#### Restaurant Skills

Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1207, 1601, 2164, MGMT 2302 and one Elective.

#### Culinary Arts

Students may apply for a certificate of completion upon satisfactory completion of: HMCA 1202, 1207, 1303, 1304, 1601, 1606, 2301, 2302, 2612, MGMT 1306 and one Elective.

# Hospitality Management

## Lodging and Tourism Management

### Associate in Applied Science Degree

First Year		Credit
<b>First Semester</b>		
HMCA 1601	Fundamentals of Food Theory	6
HMCA 1202	Safety and Sanitation	2
HMCA 1309	Introduction to Hospitality Industry and Quality Customer Care	3
ELCT*	Humanities/Fine Arts Selection	3
<b>Second Semester</b>		
HMCA 1305	Convention and Tourism	3
HMCA 1308	Front Office Procedures	3
HMCA 1304	Hospitality Law	3
ELCT	Elective	3
<b>Third Semester</b>		
ELCT*	Social/Behavioral Science Selection	3
SPCH 1315	Public Speaking	3
MGMT 1306	Human Relations	3
HMCA	Elective	3
PHED	Physical Education	1
<b>Second Year</b>		
<b>First Semester</b>		
HMCA 2302	Hospitality Industry Computer Systems	3
HMCA 2305	Facility Design, Layout and Security	3
HMCA 2306	Hospitality Accounting I	3
HMCA 2310	Property Management	3
<b>Second Semester</b>		
HMCA 2301	Management Practice HMCA	3
MATH 1342	Elementary Statistics	3
HMCA 2307	Tourism Management	3
HMCA 2308	Hospitality Sales	3
<b>Third Semester</b>		
HMCA 2309	Lodging and Tourism Practicum (Field Experience)	3
HMCA	Elective	3
ENGL 1301	Composition and Rhetoric I	3
Total Hours		72
<ul style="list-style-type: none"> <li>• Humanities/Fine Arts Selection. See Page 28.</li> <li>▪ Social/Behavioral Science Selection. See Page 28.</li> </ul>		

## Certificate of Completion

**Lodging and Tourism**  
Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1302, 1308, 1601, 2164, 2301, 2306, 2308, and MGMT 1306.

**Lodging and Restaurant Entrepreneurship**  
Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 2164, 2307, 2350, and MGMT 1308, 2301, 2309.

# Hospitality Management

## Restaurant and Institutional Management

### Associate in Applied Science Degree

#### First Year

##### First Semester

			Credit
HMCA	1601	Fundamentals of Food Theory	6
HMCA	1202	Safety and Sanitation	2
HMCA	1309	Introduction to Hospitality Industry and Quality Customer Care	3
HMCA	1207	Menu Planning	2

##### Second Semester

HMCA	1606	Culinary Principals	6
HMCA	1303	Food Purchasing	3
ELCT		Elective	3

##### Third Semester

ELCT*		Social/Behavioral Science Selection	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3
MGMT	1306	Human Relations	3
HMCA	1304	Hospitality Law	3

#### Second Year

##### First Semester

HMCA	2302	Hospitality Industry Computer System	3
HMCA	2304	Nutrition for HMCA Professionals	3
HMCA	2306	Hospitality Accounting I	3
HMCA	2305	Facility Design, Layout and Security	3

##### Second Semester

HMCA	2301	Management Practice HMCA	3
<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
ELCT*		Humanities/Fine Arts Selection	3
HMCA	2308	Hospitality Sales	3

##### Third Semester

HMCA	2303	Restaurant/Institutional Management Practicum (Field Experience)	3
HMCA		Elective	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
PHED		Physical Education	1

##### Total Hours

71

- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

## Certificate of Completion

#### Hospitality Management

Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1303, 1309, 2301, 2304, 2306, 2308; MGMT 1306.

#### Cooking and Supervision

Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1303, 1304, 1309, 2164, 2301, 2302, 2304, 2306, 1601, 1606, MGMT 1306, and one elective.

#### Dietary Manager

Students may apply for a Certificate of Completion upon satisfactory completion of HMCA 1202, 1303, 2164, 2355, 2358, and 2359.

# Interdisciplinary Studies

## Associate in Arts Degree

This is a suggested curriculum.

### First Year

#### First Semester

			Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3
<u>SCIE**</u>		Physical/Life Science	4
<u>LANG*</u>	<u>1411</u>	Foreign Language	4
<u>ELCT</u>		Elective	3
<u>PHED</u>		Physical Education	1

#### Second Semester

<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>SCIE**</u>		Physical/Life Science	4
<u>LANG*</u>	<u>1412</u>	Foreign Language	4
<u>SPCH</u>		<u>SPCH 1315 or 1321</u>	3
<u>PHED</u>		Physical Education	1

### Second Year

#### First Semester

<u>ENGL***</u>		English Selection	3
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	3
<u>MATH</u>		<u>MATH 1324, 1342 1314</u> or higher	3
<u>PSYC</u>	<u>2301</u>	Introduction to Psychology	3
<u>SOCI</u>	<u>1301</u>	Introduction to Sociology	3
<u>PHED</u>		Physical Education	1

#### Second Semester

<u>ENGL***</u>		English Selection	3
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<u>ELCT*</u>		Computer Science/Microcomputer Technology Selection	3
<u>ELCT</u>		Elective	3
<u>ELCT</u>		Elective	3
<u>PHED</u>		Physical Education	1
<b>Total Hours</b>			<b>68</b>

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* LANG: See course selection under FREN, GERM, SPAN and JAPN. If German taken first year, Beginning French or Spanish may be taken second semester.
- \*\* SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
- \*\*\* English Selection(s) include: ENGL 2322, 2323, 2327, 2328, 2332, or 2333.
- Computer Science/Microcomputer Technology Selection. See Page 28.

# Journalism/Communications

## Associate in Arts Degree

This is a suggested curriculum.

### First Year

#### First Semester

			Credit
<u>LANG*</u>	1411	Foreign Language	4
<u>COMM</u>	1307	Communications Media	3
<u>ENGL</u>	1301	Composition and Rhetoric I	3
<u>HIST</u>	1301	History of the U.S. to 1877	3
MISC	1420	Word Processing for Microcomputers	4
PHED		Physical Education	1

#### Second Semester

<u>LANG*</u>	1412	Foreign Language	4
<u>COMM</u>	2311	News Gathering and Reporting I	3
<u>ENGL</u>	1302	Composition and Rhetoric II	3
<u>HIST</u>	1302	History of the U.S. from 1877	3
MISC	1460	Desk Top Publishing	4
PHED		Physical Education	1

### Second Year

#### First Semester

SCIE**		Physical/Life Science	4
<u>COMM</u>	2315	News Gathering and Reporting II	3
<u>GOVT</u>	2301	State and Federal Government I	3
<u>MATH</u>		<u>MATH 1324, 1342, 1314</u> or higher	3
ELCT*		Humanities/Fine Arts Selection	3
PHED		Physical Education	1

#### Second Semester

SCIE**		Physical/Life Science	4
<u>COMM</u>	2305	Editing, Layout and Design	3
<u>GOVT</u>	2302	State and Federal Government II	3
<u>SPCH</u>	1315	Public Speaking	3
ENGL***		English Selection	3
PHED		Physical Education	1

**Total Hours** 70

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- \* LANG: See course selection under FREN, GERM, SPAN and JAPN.
- \*\* SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.
- \*\*\* English Electives include: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.
- Humanities/Fine Arts Selection. See Page 28.

# Law Enforcement

## Associate in Applied Science Degree

### First Year

First Semester			Credit
LAWE	1301	Introduction to Criminal Justice	3
LAWE	1304	The Courts and Criminal Procedures	3
LAWE	1307	Crime in America	3
LAWE	1308	Fundamentals of Criminal Law	3
ENGL	1301	Composition and Rhetoric I	3
PHED		Physical Education	1

### Second Semester

LAWE	1201	Defensive Tactics	2
LAWE*		Law Enforcement Option Elective	3
LAWE*		Law Enforcement Option Elective	3
LAWE*		Law Enforcement Option Elective	3
ENGL		ENGL 1302 or 2311	3
ELCT**		Law Enforcement Elective	3

### Second Year

First Semester			
LAWE	2101	Emergency Medical Aid	1
LAWE	2304	Juvenile Procedures	3
GOVT	2301	State and Federal Government I	
or			
GOVT	2302	State and Federal Government II	3
SOCI	1301	Introduction to Sociology	3
MATH		MATH 1324, 1342, 1314 or higher	3
PHED		Physical Education	1
ELCT**		Law Enforcement Elective	3

### Second Semester

LAWE	2201	Firearms	2
PSYC	2301	Introduction to Psychology	3
SPCH	1321	Business and Professional Speaking	3
ELCT*		Humanities/Fine Arts Selection	3
ELCT*		Computer Science/Microcomputer Technology Selection	3
ELCT**		Law Enforcement Elective	3
<b>Total Hours</b>			<b>67</b>

Students planning to complete a baccalaureate degree in Criminal Justice/Law Enforcement should declare a major and develop a degree plan which will meet the transfer requirements of the college of their choice, as soon as it can be determined.

- \* Law Enforcement Options:
  - Students intending to major in Law Enforcement may take LAWE 1302, 1303 and 1309.
  - Students intending to major in Corrections may take LAWE 1306, and one of the following: LAWE 1302, 1303, or 1309.
  - Students who prefer a more general Law Enforcement curriculum may take any three from LAWE 1302, 1303, 1306 or 1309.
- \*\* Law Enforcement Elective Selection includes: LAWE 1310, 1315, 2301, 2303, 2306, 2308, 2310, 2312, 2313, 2314, 2315, 2319; EMET 1402.
- \* Humanities/Fine Arts Selection. See Page 28.
- \* Computer Science/Microcomputer Technology Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of LAWE 1301, 1302, 1303, 1304, 1307, 1308, 1309, 2201, and a LAWE Elective.

# Maintenance Technology

## Associate in Applied Science Degree

### First Year

#### First Semester

			Credit
INDU	1400	Industrial Fundamentals	4
AIRC	1400	Basic Air Conditioning and Refrigeration Theory	4
MTNT	1401	Carpentry I	4
MATH		<u>MATH 1324, 1342, 1314</u> or higher	3
PHED		Physical Education	1

#### Second Semester

AIRC	1401	Electricity for Air Conditioning and Refrigeration I	4
MTNT	1402	Electricity	4
ENGL	<u>1312</u>	Communications Skills	3
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
ELCT*		Humanities/Fine Arts Selection	3

### Second Year

#### First Semester

MTNT	2402	Carpentry II	4
MTNT	2403	Plumbing I	4
AIRC	1403	Heating Systems	4
ELCT*		Computer Science/Microcomputer Technology Selection	4
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3

#### Second Semester

MTNT	2404	Painting and Refinishing	4
MTNT	2410	Plumbing II	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
DFTG	1391	Architectural Blue Print Reading	3
<b>Total Hours</b>			<b>71</b>

- \* Humanities/Fine Arts Selection. See Page 28.
- \* Computer Science/Microcomputer Technology Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of All MTNT, AIRC, WLDG, INDU and DFTG courses. (Students must complete DFTG 1391 )

# Marketing and Sales Management

## Associate in Applied Science

### First Year

First Semester			Credit
MGMT	1306	Human Relations	3
ENGL	1301	Composition and Rhetoric I	3
BUSI	1301	Introduction to Business	3
ELCT		MISC 1450 or WOPO 1305	3-4
SPCH		SPCH 1315 or 1321	3
PHED		Physical Education	1

### Second Semester

MATH		MATH 1324 or 1342	3
MGMT	2301	Marketing Principles	3
MGMT	1304	Work Organization	3
MGMT	1311	Retail Management	3
ELCT		MGMT/BUSI/REAE	3
PHED		Physical Education	1

### Second Year

First Semester			
ELCT		MGMT 1401 or 2316 or REAE 2401	3-4
ECON		ECON 2301 or 2302	3
ELCT*		Humanities/Fine Arts Selection	3
ELCT		MGMT/BUSI/REAE	3
ACCT*	2301	Principles of Accounting I	3
ELCT		MGMT/BUSI/REAE	3

### Second Semester

ELCT		MGMT 1402 or 2317 or REAE 2402	3-4
MGMT	2305	Business Law I	3
MGMT	2322	Salesmanship	3
ELCT		Elective	3
ACCT*	2302	Principles of Accounting II	3
ELCT		MGMT/BUSI/REAE	3
<b>Total Hours</b>			<b>68-71</b>

- \* OADM 2304 and 2305 may be substituted.
- \* Humanities/Fine Arts Selection. See Page 28.

# Marketing and Sales Management

## Certificate of Completion

### First Semester

MGMT	1306	Human Relations	Credit
BUSI	1301	Introduction to Business	3
ELCT		MISC 1450 or WOPO 1305	3
ELCT		BUSI/MGMT/REAE	3-4
			3

### Second Semester

MGMT		MGMT 1401 or 2316 or REAE 2401	3-4
MGMT	2301	Marketing Principles	3
MGMT	2322	Salesmanship	3
ELCT		BUSI/MGMT/REAE	3
Total Hours			24-26

# Marketing and Sales Management

## Associate in Applied Science

### Food Service Option

#### First Year

First Semester			Credit
MGMT	1306	Human Relations	3
ENGL	1301	Composition and Rhetoric I	3
BUSI*	1301	Introduction to Business	3
WOPO	1305	Applicational Software	3
SPCH		<u>SPCH 1315 or 1321</u>	1
PHED		Physical Education	

#### Second Semester

MATH	1342	Elementary Statistics	3
MGMT	2301	Marketing Principles	2
HMCA	1202	Sanitation and Safety	3
MGMT	1311	Retail Management	2
HMCA	1207	Menu Planning	3
HMCA	1304	Hospitality Industry Law	

#### Second Year

First Semester			Credit
HMCA	1303	Food Purchasing	3
ELCT*		Social/Behavioral Science Selection	3
ELCT*		Humanities/Fine Arts Selection	3
HMCA	2302	Hospitality Industry Computer System	3
HMCA	2305	Facility Design, Layout and Security	3
HMCA	2306	Hospitality Accounting I	

#### Second Semester

HMCA	2308	Hospitality Industry Sales Promotion	3
HMCA	2351	Cafeteria Management	3
MGMT	2322	Salesmanship	3
ELCT		Elective	3
HMCA	2357	Hospitality Accounting II	3
HMCA	2304	Nutrition for HMCA Professionals	
<b>Total Hours</b>			<b>68</b>

- \* MGMT 1305 may be substituted.
- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

# Medical Technology

## Associate in Science Degree

### First Year

#### First Semester

			Credit
<u>BIOL</u>	<u>2401</u>	Human Anatomy	4
<u>CHEM</u>	<u>1411</u>	General Chemistry I	4
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3
<u>MATH</u>	<u>1314</u>	College Algebra	3
<u>PHED</u>		Physical Education	1

#### Second Semester

<u>BIOL</u>	<u>2402</u>	Human Physiology	4
<u>CHEM</u>	<u>1412</u>	General Chemistry II	4
<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
<u>PHED</u>		Physical Education	1

### Second Year

#### First Semester

<u>BIOL</u>	<u>2421</u>	Microbiology	4
<u>CHEM</u>	<u>2423</u>	Organic Chemistry I	4
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	3
<u>PHYS</u>	<u>1401</u>	College Physics I	4
<u>MISC</u>	<u>1450</u>	Microcomputers for Business	4
<u>PHED</u>		Physical Education	1

#### Second Semester

<u>ENGL</u>	<u>2311</u>	Technical Writing	3
<u>ELCT</u> •		Humanities/Fine Arts Selection	3
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
<u>PHYS</u>	<u>1402</u>	College Physics II	4
<u>SPCH</u>	<u>1315</u>	Public Speaking	3
<u>PHED</u>		Physical Education	1
<b>Total Hours</b>			<b>73</b>

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

- Humanities/Fine Arts Selection. See Page 28.

# Microcomputer Technology

## Information Management

### Associate in Applied Science Degree

#### First Year

First Semester			Credit
MISC	1400	Microcomputer Fundamentals	4
MISC	1420	Word Processing for Microcomputers	4
MISC	1430	Spreadsheets for Microcomputers	4
MISC	1450	Microcomputers for Business	4
PHED		Physical Education	1

#### Second Semester

MISC	1440	Data Base for Microcomputers	4
MISC	1451	Introduction to Microcomputer Programming	4
MISC	1461	Operating Systems	4
MGMT	1305	Introduction to Management	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3

#### Second Year

First Semester			Credit
ELCT		COSC/MISC Technical Elective	4
<u>MATH</u>		<u>MATH 1324, 1342, 1314 or higher</u>	3
ELCT*		ACCT Elective Selection	3
ELCT*		Humanities/Fine Arts Selection	3
ELCT*		Social/Behavioral Science Selection	3

#### Second Semester

MISC	2301	Information Center Management	3
MISC	2402	Systems in the MIS Environment	4
MISC	2454	Basic Communications, Networking and Internet	4
ELCT		COSC/MISC Technical Elective	4
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
<b>Total Hours</b>			<b>69</b>

- \* ACCT Elective selection includes WOPO 2304, OADM 2304, ACCT 2301
- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

# Microcomputer Technology

## Programmer Analyst

### Associate in Applied Science Degree

#### First Year

First Semester			Credit
MISC	1405	Computer Concepts and Analysis	4
MISC	1451	Introduction to Microcomputer Programming	4
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>MATH</u>		<u>MATH 1324, 1342, 1314</u> or higher	3
PHED		Physical Education	1

#### Second Semester

MISC	1404	COBOL Programming	4
MISC	1406	Computer Organization and Architecture	4
MISC	1454	PASCAL Programming	4
MISC	1461	Operating Systems	4

#### Second Year

First Semester			
MISC	2456	C Language Programming I	4
ELCT		COSC/MISC Technical Elective	4
ELCT		COSC/MISC Technical Elective	4
ELCT*		ACCT Selection	3
ELCT■		Social/Behavioral Science Selection	3

#### Second Semester

MISC	2402	Systems in the MIS Environment	4
MISC	2454	Basic Communications, Networking and Internet	4
ELCT		COSC/MISC Technical Elective	4
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
ELCT*		Humanities/Fine Arts Selection	3

**Total Hours** **67**

- \* ACCT Elective selection includes WOPO 2304, OADM 2304, ACCT 2301.
- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

# Military Science Management

## Associate in Applied Science Degree

### First Year

First Semester			Credit
MILS*	1101	Military Science I	1
MILS	1301	U.S. Heritage, Mission, Organization	3
MILS	1300	Military Organization and Staff Functions	3
MILS	1202	Briefing Techniques, Aids and Devices	2
MGMT	1204	Setting Goals and Objectives	2
MILS		Lower Level MILS Elective	2
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
PHED		Physical Education	1

### Second Semester

MILS	1102	Fundamentals of Leadership	1
MILS	2101	Stress Management	1
MILS**	1201	Military Science II	2
MILS	1203	Professionalism and Responsibility	2
MGMT	1205	Analysis of Training Requirements	2
<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
PHED		Physical Education	1
ELCT*		Humanities/Fine Arts Selection	3

### Second Year

First Semester			
MILS	2211	Job Performance and Motivation	2
MILS***	2201	Military Science III	2
MILS	1207	Professional Development of the Manager	2
MILS*4		MILS Elective	3
<u>GEOG*5</u>	<u>1302</u>	Cultural Geography	3
ELCT		MILS or MGMT Elective	3
PHED		Physical Education	1

### Second Semester

MILS	2206	Management and Learning Strategies	2
MILS	2351	Advanced Leadership	3
MILS	2354	Management Problems	3
MILS	2103	Time Management	1
ELCT*6		MILS or MGMT Elective	3
WOPO	1101	Introduction to MS-DOS	1
WOPO	1102	Introduction to WordPerfect	1
WOPO	1104	Introduction to Lotus 123	1
PHED		Physical Education	1

### Total Hours

67

- \* May substitute MILS 1106 or 1107.
- \*\* May substitute MILS 1210 or 1212.
- \*\*\* May substitute MILS 1211 or 1213.
- \*4 MILS 2371, 2372 or 2373.
- \*5 May Substitute any foreign language or PHIL 2303.
- \*6 Approved Electives: MILS 1105, 1108, 1204, 1205, 1208, 1209, 2109, 2202, 2203, 2204, 2205, 2207, 2208, 2209, 2210, 2261, 2301, 2309, 2352, 2372 and MGMT 1206, 1305, 2309, 2310 .
- Humanities/Fine Arts Selection. See Page 28.

# Office Management

## Associate in Applied Science Degree

### First Year

#### First Semester

			Credit
WOPO*	1303	Beginning Keyboarding/Data Entry	3
OADM	1309	Business Mathematics and Calculating Machines	3
MGMT	1304	Work Organization	3
MGMT	1305	Introduction to Management	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
WOPO	1101	MS-DOS: An Introduction	1

#### Second Semester

WOPO	1304	Intermediate Information Processing Applications	3
WOPO	1307	Word Processing and Transcription	3
OADM	1305	Information and Records Management	3
OADM	1308	Business Correspondence	3
WOPO	1305	Applicational Software	3
PHED		Physical Education	1

### Second Year

#### First Semester

OADM	2304	Office Accounting I	3
MGMT	2305	Business Law I	3
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
ELCT††		Social/Behavioral Science Selection	3
MATH		<u>MATH 1324, 1342, 1314 or higher</u>	3
PHED		Physical Education	1

#### Second Semester

OADM	2305	Office Accounting II	3
OADM	2307	Automated Office Administration	3
MGMT	2302	Human Resource Management	3
WOPO	2302	Advanced Information Processing Applications	3
ELCT†		Humanities/Fine Arts Selection	3
ELCT		OADM/WOPO Selection	3
<b>Total Hours</b>			<b>66</b>

- \* Levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests.
- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion, General Office Assistant, upon satisfactory completion of ALL first-year courses.

# Paralegal/Legal Assistant

## Associate in Applied Science Degree

### First Year

#### First Semester

LEGA	1401	Introduction to Paralegalism	Credit	4
LEGA	1302	Legal Office Ethics and Management		3
LEGA	1304	Principles of Family Law		3
ENGL	1312	Communications Skills		3
GOVT	2301	State and Federal Government I		3
WOPO**	1303	Beginning Keyboarding		3

#### Second Semester

LEGA	1306	Criminal Law	3
LEGA	1307	Civil Litigation	3
MATH		MATH 1324 or 1342	3
MISC	1420	Word Processing for Microcomputers	4
LEGA	2301	Torts and Personal Injury	3
PHED		Physical Education	1

### Second Year

#### First Semester

LEGA	2302	Contract Law and the UCC	3
LEGA	2406	Techniques of Legal Research	4
LEGA*		Approved Elective	3
ELCT		ACCT 2301 or OADM 2304	3
GOVT	2302	State and Federal Government II	3
PHED		Physical Education	1

#### Second Semester

LEGA	2405	Wills Trust and Probate	4
LEGA*		Approved Elective	3
LEGA*		Approved Elective	3
HUMA*		Humanities/Fine Arts Selection	3
LEGA	2401	Techniques of Legal Practice	4

#### Total Hours

70

- \* Approved Elective Selection includes: LEGA 1305, 1308, 1309, 1403, 2101, 2301, 2303, 2307, 2308.
- \*\* Demonstrated proficiency to type 30 wpm may be substituted.
- Humanities/Fine Arts Selection. See Page 28.

# Real Estate

## Real Estate Sales Agent Certificate of Completion

First Semester		Credit
REAE*	1301 Real Estate Fundamentals	3
REAE*	1304 Real Estate Law: Agency	3
ELCT*	2300 Contract Law	3
REAE*	REAE (Except 2401/2402) or Approved Selection	3
REAE	2401 Real Estate Internship I	4
Total Hours		16

- \* Upon successful completion of these courses, the student is eligible to sit for the Texas Real Estate Sales Agent License exam.

# Small Gas Engine Repair

## Associate in Applied Science

### First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
SGER	1401	Gas Engine Fundamentals	4
<u>ENGL</u>	<u>1312</u>	Communications Skills	3
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
SGER	2311	Shop Organization and Management	3

### Second Semester

SGER	1407	Small Gas Engine Service	4
MATH		<u>MATH 1324, 1342, 1314 or higher</u>	3
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
ELCT*		Humanities/Fine Arts Selection	3
SGER	2402	Chain Saw Service and Repair	4

### Second Year

First Semester			
WLDG	1430	Introduction to Gas Metal Arc (MIG) Welding	4
SGER	2408	Outboard Motor Service and Repair	4
SGER	2412	Motion Drive Systems	4
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3
ELCT		Elective	3

### Second Semester

SGER	2410	Lawn and Garden Equipment Service	4
SGER	2413	Large Air Cooled Engines	4
MGMT	1308	Small Business Management	3
ELCT*		Computer Science/Microcomputer Technology Selection	3
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
PHED		Physical Education	1
<b>Total Hours</b>			<b>72</b>

- Humanities/Fine Arts Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all SGER, MGMT, WLDG, and INDU courses.

# Social Science

## Associate in Arts Degree

This is a suggested curriculum.

### First Year

First Semester			Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3
<u>LANG*</u>	<u>1411</u>	Foreign Language	4
<u>SCIE**</u>		Physical/Life Science	4
<u>MATH</u>	<u>1314</u>	College Algebra	3
<u>PHED</u>		Physical Education	1

### Second Semester

ENGL	<u>1302</u>	Composition and Rhetoric II	3
HIST	<u>1302</u>	History of the U.S. from 1877	3
LANG*	<u>1412</u>	Foreign Language	4
SCIE**		Physical/Life Science	4
ELCT*		Humanities/Fine Arts Selection	3
PHED		Physical Education	1

### Second Year

#### First Semester

ENGL***		ENGL Selection	3
GOVT	<u>2301</u>	State and Federal Government I	3
PSYC	<u>2301</u>	Introduction to Psychology	3
ELCT♦		Computer Science/Microcomputer Technology Selection	4
ELCT*‡		Social Science	3
PHED		Physical Education	1

#### Second Semester

SPCH		SPCH Selection	3
GOVT	<u>2302</u>	State and Federal Government II	3
SOCI	<u>1301</u>	Introduction to Sociology	3
ELCT■		Social/Behavioral Science Selection	3
ELCT		Elective	3
PHED		Physical Education	1
<b>Total Hours</b>			<b>69</b>

In cases where freshman and/or sophomore degree requirements of the receiving college for a bachelor's degree differ from those listed above, changes can be made in the Associate in Arts/Science degree requirements when approved by the appropriate department chair.

\* LANG: See course selection under FREN, GERM, SPAN, and JAPN.

\*\* SCIE: See course selection under BIOL, CHEM, GEOL, PHYS.

\*\*\* English Elective selections include: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

\*‡ Social Science Elective selection should be made from sophomore-level courses.

• Humanities/Fine Arts Selection. See Page 28.

■ Social/Behavioral Science Selection. See Page 28.

♦ Computer Science/Microcomputer Selection. See Page 28.

# Transportation Technology

## Associate in Applied Science Degree

### First Year

First Semester			Credit
ENGL*		<u>ENGL 1301 or 1312</u>	3
MATH		<u>MATH 1314 or 1342</u>	3
OADM	2304	Office Accounting I	
or			
<u>ACCT</u>	<u>2301</u>	Principles of Accounting I	3
TRAN	1301	Introduction to Transportation	3
TRAN	1302	International Trade	3
PHED		Physical Education	1

### Second Semester

ELCT*		<u>SPCH 1315 or ENGL 2311</u>	3
OADM	2305	Office Accounting II	
or			
<u>ACCT</u>	<u>2302</u>	Principles of Accounting II	3
TRAN	1303	Economics of Transportation I	3
TRAN	1304	Interstate Commerce and Practice	3
MGMT	1306	Human Relations	3
PHED		Physical Education	1

### Second Year

First Semester			
MGMT	2302	Human Resource Management	3
TRAN	2301	Economics of Transportation II	3
TRAN		Transportation Elective	3
TRAN	2303	Traffic Management I	3
TRAN	2311	Transportation Marketing	3
ELCT♦		Computer Science/Microcomputer Technology Selection	3

### Second Semester

MGMT	2309	Supervision	3
TRAN	2304	Traffic Management II	3
TRAN	2302	Transportation Law and Regulation	3
TRAN		Transportation Elective	3
ELCT■		Social/Behavioral Science Selection	3
ELCT*		Humanities/Fine Arts Selection	3
<b>Total Hours</b>			<b>68</b>

- \* If student completes ENGL 1301, then SPCH 1315 must be taken. If student completes ENGL 1312, either SPCH 1315 or ENGL 2311 may be taken.
- Humanities/Fine Arts Selection. See Page 28.
- Social/Behavioral Science Selection. See Page 28.
- ♦ Computer Science/Microcomputer Technology Selection. See Page 28.

# Welding

## Associate in Applied Science Degree

### First Year

First Semester			Credit
INDU	1400	Industrial Fundamentals	4
WLDG	1425	Introduction to Oxy-Fuel Welding and Cutting	4
WLDG	1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
MATH		<u>MATH 1324, 1342, 1314</u> or higher	3
ELCT		Elective	3

### Second Semester

WLDG	1457	Intermediate Shielded Metal Arc Welding (SMAW)	4
WLDG	2439	Advanced Oxy-Fuel Welding and Cutting	4
WLDG	1413	Introduction to Blueprint Reading for Welders	4
PHED		Physical Education	1
<u>ENGL</u>	<u>1312</u>	Communications Skills	3

### Second Year

First Semester			
WLDG	2443	Advanced Shielded Metal Arc Welding (SMAW)	4
WLDG	1435	Introduction to Pipe Welding	4
WLDG	1434	Introduction to Gas Tungsten Arc (TIG) Welding	4
ELCT*		Computer Science/Microcomputer Technology Selection	3
<u>GOVT</u>	<u>2301</u>	State and Federal Government I	
or			
<u>GOVT</u>	<u>2302</u>	State and Federal Government II	3

### Second Semester

WLDG	2453	Advanced Pipe Welding	4
<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
WLDG	1430	Introduction to Gas Metal Arc (MIG) Welding	4
ELCT*		Humanities/Fine Arts Selection	3
WLDG	1417	Introduction to Layout and Fabrication	4
<b>Total Hours</b>			<b>70</b>

- \* Humanities/Fine Arts Selection. See Page 28.
- \* Computer Science/Microcomputer Technology Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion upon satisfactory completion of all WLDG and INDU courses.

# Word Processing Specialist

## Associate in Applied Science Degree

### First Year

First Semester		Credit
WOPO 1101	MS-DOS: An Introduction	1
WOPO* 1303	Beginning Keyboarding/Data Entry	3
OADM 2304	Office Accounting I	3
ENGL	English Selection	3
OADM 1305	Information and Records Management	3
ELCT**	OADM/WOPO Selection	3

### Second Semester

SPCH	<u>SPCH 1315 or 1321</u>	3
WOPO 1305	Applicational Software	3
WOPO* 1304	Intermediate Information Processing Applications	3
WOPO 1307	Word Processing/Transcription	3
OADM 1308	Business Correspondence	3

### Second Year

First Semester		
MATH	<u>MATH 1324, 1342, 1314 or higher</u>	3
WOPO 2303	Office Automation	3
WOPO 2308	Information System Internship I	3
ELCT*	Humanities/Fine Arts Selection	3
ELCT**	OADM/WOPO Selection	3
PHED	Physical Education	1

### Second Semester

OADM 2305	Office Accounting II	3
OADM 2307	Automated Office Management	3
WOPO 2302	Advanced Information Processing Applications	3
WOPO 2309	Information Systems Internship II	3
ELCT*	Social/Behavioral Science Selection	3
PHED	Physical Education	1
<b>Total Hours</b>		<b>63</b>

\* Level of keyboarding will be determined by the student's previous training in these skills and/or by placement tests.

\*\* Elective selection must be approved by the Department Chair.

\* Humanities/Fine Arts Selection (must be sophomore level). See Page 28.

\* Social/Behavioral Science Selection. See Page 28.

## Certificate of Completion

Students may apply for a Certificate of Completion, Word Processing Operator, after satisfactory completion of ALL first-year courses.

## (ACCT) Accounting

### **ACCT 2301 Principles of Accounting I 3-0-3**

An introduction to accounting with emphasis on the accounting cycle and accounting systems. Topics include cash transactions, receivables, inventories, assets, liabilities, and partnerships.

### **ACCT 2302 Principles of Accounting II 3-0-3**

A continuation of ACCT 2301 including accounting for corporations, analysis of financial statements, accounting for manufacturing operations, and introductory managerial accounting concepts. Prerequisite: ACCT 2301.

## (ACTE) Accounting Technology

### **ACTE 1301 Principles of Accounting I 3-0-3**

An introduction to accounting with emphasis on the accounting cycle and accounting systems. Topics include cash transactions, receivables, inventories, assets, liabilities, and partnerships.

### **ACTE 1302 Principles of Accounting II 3-0-3**

Continuation of ACTE 1301. Accounting for corporations, analysis of financial statements, accounting for manufacturing operations, and introductory managerial accounting concepts. Prerequisite: ACTE 1301.

### **ACTE 2305 Basics of Managerial Accounting 3-0-3**

A study of the methods by which accounting data are used by management in planning, coordinating, and controlling the operations of a business. Measurement of financial position, analysis of financial statements, cost accumulation and analysis, budgeting, product costing, and quantitative decision techniques. Prerequisite: ACTE 1302.

### **ACTE 2306 Cost Accounting 3-0-3**

An introduction to the objectives and procedures of cost accounting and control for business firms. It covers the principles and methods of accounting for materials, direct labor, and the distribution of overhead expenses as well as cost records, operating reports, and budgetary control. Prerequisite: ACTE 1302.

### **ACTE 2309 Fundamentals of Accounting III 3-0-3**

A detailed study of financial accounting with emphasis on financial statements, current assets, current liabilities, property, plant and equipment, present value concepts, short-term investments, and intangible assets. Prerequisite: ACTE 1302 with a minimum grade of C.

### **ACTE 2310 Fundamentals of Accounting IV 3-0-3**

Continuation of ACTE 2309. Long-term liabilities, corporate capital, accounting for leases and pensions, analysis of financial statements, sources and uses of funds, long-term investments, and price level impact on financial statements. Prerequisite: ACTE 2309.

### **ACTE 2311 Accounting and Financial Information Systems I 3-0-3**

Study of overall flow systems emphasizing financial data and computerized systems. It covers flow and logic concepts, development of meaningful control concepts, and data reporting techniques. Prerequisite: ACTE 1302.

### **ACTE 2312 Accounting and Financial Information Systems II 3-0-3**

This course is a continuation of ACTE 2311. Prerequisite: ACTE 2311.

## (AIRC) Air Conditioning

### **AIRC 1201 Air Conditioning and Refrigeration Theory and Application I 1-2-2**

This course deals with the basic physical principles of air conditioning and refrigeration equipment. Introduction to basic thermodynamics and physics that pertain to heat, temperatures, pressures, fluids and refrigerants. Mechanics pertaining to piping and the specialized tools needed for piping.

### **AIRC 1202 Air Conditioning and Refrigeration Theory and Application II 1-2-2**

Continuation of AIRC 1201. This course includes the identification of various types of air conditioning systems, compressors, metering devices and a service procedure for basic air conditioning and refrigeration systems. Prerequisite: AIRC 1201.

### **AIRC 1400 Basic Air Conditioning and Refrigeration Theory 3-3-4**

This course introduces the student to basic thermodynamics-heat transfer, temperature-pressures, and characteristics of refrigerants; pressure-temperature relationships of refrigerants; the refrigeration cycle; major components of refrigeration systems and their relationship to each other. The use of temperature measuring devices and special tools (manifold gauge set, charging station, vacuum and vacuum pump, and micron gauge) is covered. EPA requirements for refrigerant handling and recovery are also covered.

### **AIRC 1401 Electricity for Air Conditioning and Refrigeration I 3-3-4**

This course introduces the student to the basic concepts of electricity as they apply to air conditioning and refrigeration. It includes quantities, units, circuits, laws, measurements, alternating current fundamentals, magnetism, electromagnetism, instruments, power, inductance, capacitance and transformers.

### **AIRC 1403 Heating Systems 3-3-4**

This course introduces the student to residential, natural gas, liquefied petroleum, and electrical heating systems. Emphasis will be placed on natural gas and electrically forced air systems, heat exchangers, gas circuits, air side, cabinet construction, sequencers, limits, and heating elements. Corequisite: AIRC 1401.

### **AIRC 1406 Electricity for Air Conditioning and Refrigeration II 3-3-4**

This course reviews the alternating current fundamentals; simple alternating current circuits; single-phase air conditioning circuits; three-phase circuits; single- and three-phase transformers; three-phase induction motors; single-phase motors and motor control; and generation, transmission, and distribution of electrical energy. Prerequisite: AIRC 1401.

### **AIRC 1407 Mechanical Refrigeration Systems 3-3-4**

This course provides the student with an in-depth study of mechanical refrigeration systems. The major components of a refrigeration system are examined to include compressors, evaporators, condensers, refrigerant flow control devices, interconnecting lines, driers, receivers and accumulators. Charging with refrigerants, household refrigeration and air conditioning systems and refrigerant piping, and the use of pressures in diagnosis of refrigeration circuit malfunctions are also covered. Corequisites: AIRC 1400 and 1401.

### **AIRC 2400 Electricity for Air Conditioning and Refrigeration III 3-3-4**

This course will provide the student with an in-depth study of schematic wiring diagrams and electrical troubleshooting using the diagrams. Prerequisite: AIRC 1401 and 1406.

**AIRC 2401 Advanced Air Conditioning and Refrigeration Theory 3-3-4**

This course provides the student with an in-depth study of the basic principles of air conditioning design, heat load calculation, air distribution design, building components composition, and insulation. The student will construct ducts, including flex ducts, and install galvanized round pipe and equipment. Prerequisites: All AIRC 1400-series courses.

**AIRC 2402 Commercial Refrigeration 3-3-4**

This course introduces the student to the different types of commercial refrigeration units and systems. Instruction is provided in controls and control circuits for commercial refrigeration. Heat loss and gain calculations for commercial applications, equipment selection, locating and piping procedures, and service procedures for different systems will be covered. Prerequisites: All AIRC 1400-series courses.

**AIRC 2403 Commercial Air Conditioning 3-3-4**

This course is designed to cover heat transfer and heat loss/gain calculations as they apply to commercial heating and air conditioning. Instruction includes psychometrics of conditioned air, duct design and layout, equipment selection and location, shop drawings, controls and control circuits for automatic conditioning of air. It covers installation, operation, troubleshooting and repair of light commercial air conditioning up to 10-ton capacity.

**AIRC 2404 Troubleshooting Air Conditioning and Refrigeration Systems 3-3-4**

This course provides the student with the fundamentals of electrical testing of air conditioning and refrigeration circuits, circuit analysis, and repair/replacement of circuit components. Emphasis will be placed on air conditioning electrical systems. An overview of single-family residential wiring including the construction of main and branch circuits is presented. Prerequisites: All AIRC 1400-series courses.

**AIRC 2405 Heat Pumps I 3-3-4**

This course will introduce the student to heat pumps including geothermal systems; heating, cooling, and defrost cycles; components; reversing valves; flow controls; accumulator piping; heat pump controls; system design; and ground loop heat exchangers. Prerequisites: All AIRC 1400-series courses.

**AIRC 2407 Heat Pumps II 3-3-4**

This course is a continuation of AIRC 2405, Heat Pumps I. It covers analysis of system operations, troubleshooting, service, and repair. Prerequisite: AIRC 2405.

**(ANTH) Anthropology**

**ANTH 2301 Physical Anthropology 3-0-3**

Principles of physical anthropology, human evolution, race, heredity, the organic basis of culture, and cultural history through the Paleolithic stage.

**ANTH 2346 General Anthropology 3-0-3**

Study of human beings, their antecedents and related primates, and their cultural behavior and institutions. Introduces the major subfields: physical and cultural anthropology, archeology, linguistics and ethnology.

**ANTH 2351 Cultural Anthropology 3-0-3**

Study of human behavior (nations and societies) the world over, comparing and describing the cultural patterns of westernized industrial nations; Asiatic people; the Middle East; and today, the cultures of emerging Third World nations. A study is also made of the relationship of Cultural Anthropology to the other social sciences (Psychology, Sociology, History, etc.).

**(APPH) Applied Physics**

**APPH 1350 Applied Physics I 3-0-3**

This course is designed for students in technical areas who must be able to apply certain basic principles of physics to their career field. The course considers only certain areas of physics; especially mechanics, heat, fluids, and the nature of matter.

**APPH 1351 Applied Physics II 3-0-3**

This is a continuation of Applied Physics I for students in technical areas who must be able to apply certain basic principles of physics to their career field. This course covers wave motion, light electricity and magnetism, applied electronics, and provides an introduction to nuclear energy. Prerequisite: APPH 1350.

**(ARTS) Art**

**ARTS 1303 Art History I 3-0-3**

This course is survey of the major and minor arts from prehistoric times to the 14th century.

**ARTS 1304 Art History II 3-0-3**

This course is a survey of the major and minor arts from the 14th century to the present. No prerequisite.

**ARTS 1311 Design: 2-D 2-4-3**

This course gives basic instruction in the elements and principles of design, with emphasis on the study of form and color theory. It is a study of design in two-dimensional formats.

**ARTS 1312 Design: 3-D 2-4-3**

This course gives basic instruction in the principles and elements of design as applicable to three-dimensional design problems. No prerequisite.

**ARTS 1313 Foundations of Art 2-4-3**

This course is an introduction to the creative media. Enhancing artistic awareness and sensitivity through the creative and imaginative use of art materials and tools is the focus of the course. Students will also be exposed to art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth. No prerequisite.

**ARTS 1316 Drawing I 2-4-3**

This course involves a study of the basic drawing skills including both abstraction and expressive drawing in charcoal, pencil, pen, wash, conte, and mixed media.

**ARTS 1317 Drawing II 2-4-3**

This course continues the development of skills, application of drawing media, and personal expression explored in Drawing I. Prerequisite: ARTS 1316.

**ARTS 2311 Design: Computer-Aided Art 2-4-3**

This course is designed primarily for the Commercial Art major, but can apply to Fine Art as well. The student will learn to use standard computer-aided techniques in creating and elaborating upon designs and in lettering production. Prerequisite: Computer Science elective and ARTS 1311.

**ARTS 2313 Computer Illustration and Advertising Art I 2-4-3**

This course is an in-depth study of current concerns and practices in the visual arts including contemporary media and techniques with heavy emphasis on computer-aided design, philosophy of aesthetics, and public accessibility.

**ARTS 2314 Computer Illustration and Advertising Art II** 2-4-3

This course is an advanced study of commercial art pre-press production. It combines principles covered in Computer Illustration and Advertising Art I. Prerequisite: ARTS 2313.

**ARTS 2316 Oil Painting I** 2-4-3

This course studies the techniques and materials used in oil-based painting. Drawing skills are recommended.

**ARTS 2317 Oil Painting II** 2-4-3

This course is a continuation of techniques explored in ARTS 2316 with emphasis on individual expression. Prerequisite: ARTS 2316.

**ARTS 2323, 2324 Figure Drawing I and II** 2-4-3

These are life drawing courses which emphasize structure and action of the human figure.

**ARTS 2326 Sculpture I** 2-4-3

This course is an introduction to sculpturing techniques including assemblage, carving, and lost wax casting.

**ARTS 2327 Sculpture II** 2-4-3

This course is a continuation of ARTS 2326 with emphasis on personal expression. Prerequisite: ARTS 2326.

**ARTS 2333 Print Making** 2-4-3

This introductory course covers the fundamentals and creative experimentation in etching, serigraphy, and other print-making media. Drawing skills are recommended.

**ARTS 2336 Fiberarts I** 2-4-3

This course involves the study of weaving, rug making, dyeing, and paper making. Emphasis will vary from one semester to another.

**ARTS 2337 Fiberarts II** 2-4-3

This course is a continuation of ARTS 2336. Emphasis will vary from one semester to another.

**ARTS 2341 Jewelry and Art Metals I** 2-4-3

An introduction to jewelry-making and metalworking techniques. Basic fabrication techniques are stressed.

**ARTS 2342 Jewelry and Art Metals II** 2-4-3

A continuation of jewelry-making and metalworking techniques. Lost wax casting and surface treatments are emphasized. Prerequisite: ARTS 2341.

**ARTS 2346 Ceramics I** 2-4-3

This course is an introduction to making pottery by hand-built methods. Glazing and decoration techniques are covered.

**ARTS 2347 Ceramics II** 2-4-3

This course is a continuation of pottery-making techniques. Prerequisite: ARTS 2346.

**ARTS 2356 Photography I** 2-4-3

An introduction to the basics of photography. Technical information will include camera operation, black and white camera techniques, knowledge of chemistry, and presentation skills. Much emphasis will also be placed on design, history, and contemporary trends as a means of developing an understanding of photographic aesthetics. Students will be asked to complete projects which address art, journalism, and commercial photography.

**ARTS 2357 Photography II** 2-4-3

Extends the student's knowledge of technique and guides them in developing a personal outlook toward a specific application of the photographic process. Prerequisite: ARTS 2356.

**ARTS 2366 Watercolor Painting** 2-4-3

This course covers various techniques of painting in watercolor. It stresses color and composition in application of the medium. Drawing skills are recommended.

**ARTS 2367 Acrylic Painting** 2-4-3

This course covers the properties of color, theory of color and form, and technical procedures of the medium. Drawing skills are recommended.

**ARTS 2376 Problems in Contemporary Arts** 2-3-3

This course is an examination of current issues and practices in the visual arts. Historical influences, modern aesthetics, contemporary media and techniques, and individual concerns will be covered in lectures, studio practice, and research outside the traditional classroom.

## (ATBR) Automotive Body Repair

**ATBR 1403 Roughing and Alignment I** 3-3-4

This course is designed to provide the student with a fundamental working knowledge of the theory and application of damage analysis and reversal as it applies to minor body damage. Emphasis will be placed on damage classification and identification, proper tool selection and use for specific repairs, heat shrinking, metal finishing techniques, and the alignment of movable body panels. Prerequisites or Corequisites: INDU 1400, ATBR 1405 or ATBR 1407.

**ATBR 1405 Auto Body Welding I** 3-3-4

This course is designed to provide the student with a working knowledge and practical skill development in the use of oxyacetylene welding equipment as it relates to auto body repair procedures. Emphasis will be placed on safety, equipment construction and function, types and preparation of joints, and welding procedures on body steel. Prerequisite or Corequisite: INDU 1400.

**ATBR 1407 Auto Body Fundamentals** 3-3-4

This course is designed to provide the student with basic skills in general body shop safety, hand and power tool use, measurement techniques, selection and use of repair materials, and nonmetal parts repair. Also covered in the course are details of both conventional and unitized body construction including parts nomenclature and methods of attachment. The student will also be introduced to general shop operation and to the methods of collision repair estimation. Prerequisite or Corequisite: INDU 1400.

**ATBR 1408 Roughing and Alignment II** 3-3-4

This is an advanced course designed to provide the student with further practical skill development in the correction of minor body damage and is an introduction to the repair of body structural damage. Emphasis will be placed on proper analysis and correction through the use of measurement techniques and hydraulic repair equipment. Prerequisites: ATBR 1403, 1405, 1407 and 1409.

**ATBR 1409 Auto Body Welding II** 3-3-4

This course is designed to provide the student with a working knowledge and practical skill development in the use of GMAW (MIG), resistance spot welder, and shielded metal arc welder as they relate to auto body repair. Emphasis will be placed on safety, equipment construction and function, joint preparation, and welding procedures on both mild and HSLA body steel. Prerequisite: ATBR 1405.

**ATBR 1410 Auto Body Painting Fundamentals** 3-3-4

This course is designed to provide the student with a basic knowledge and skills required in the painting of body panels. Emphasis will be placed on the proper use and care of the spray gun, surface preparation for different repair materials, sanding, masking, cleaning, compounding, preparation of refinished material, and recognition/correction of paint problems. Prerequisites or Corequisites: INDU 1400 and ATBR 1407.

**ATBR 1411 Automotive Glass 3-3-4**  
This course is designed to provide the student with a knowledge of the types of glass and weather sealing devices and service, and various types of power-assist devices and minor electrical repairs. Prerequisite or Corequisite: INDU 1400.

**ATBR 2400 Major Vehicle Damage Repair 3-3-4**  
This course is a continuation of ATBR 2401 and 2406 and places emphasis on developing the skills involved in major vehicle damage repairs using the latest techniques and equipment including body sectioning and the use of recycled parts. Prerequisites: All first-year ATBR courses, ATBR 2401, and ATBR 2406.

**ATBR 2401 Panel Repair and Replacement 3-3-4**  
This course places heavy emphasis on straightening and fitting panels and employs welding, dinging, bumping, and alignment procedures. The use of body fillers, contour finishing, and metal preparation are also included. Prerequisites: All first-year ATBR courses.

**ATBR 2404 Advanced Auto Body Painting 3-3-4**  
This course is designed to increase the student's knowledge and skills in auto body refinishing. Emphasis will be placed on the techniques and materials used in the spot repair of both enamels and lacquers, the use of color coat/clear coat systems, tinting and blending of spot repairs, stripe and accent painting, and complete vehicle refinishing. Prerequisites: ATBR 1407 and 1410.

**ATBR 2406 Frame Repair and Alignment 3-3-4**  
This course is designed to provide the student with a working knowledge of the types of body frames, misalignment, alignment straightening, repair, and the use of special equipment and measuring devices. Prerequisites: ATBR 1405, 1407, and 1408.

## (AUTO) Automotive Service and Repair

**AUTO 1150 Auto Maintenance Procedures (Electrical and Body) 0.3-1-1**  
Designed to teach the student to perform maintenance and troubleshooting on the electrical systems and body maintenance.

**AUTO 1151 Auto Maintenance Procedures (Brakes) 0.3-1-1**  
Provides the student with the knowledge and skills to maintain and troubleshoot the brake system as detailed in the service manual.

**AUTO 1253 Operational Maintenance Course 0.5-2-2**  
Course is designed to teach vehicle operators to perform maintenance on and operate the M-809 series, 5-ton and unit generators.

**AUTO 1254 Operators Training & Maintenance 2-2-2**  
This course is designed to teach proper operation and maintenance of vehicles; includes maintenance forms, safety and accident forms, Preventive Maintenance Checks and Service (PMCS), use of publications, and NSC Defensive Driving.

**AUTO 1255 Motor Sergeant's Maintenance Management 1.5-1-2**  
Provides training in procedures and techniques of establishing, conducting, and evaluating standard maintenance programs for unit vehicles. Includes maintenance operations, organization management, controls, requirements, training, and records.

**AUTO 1301 Automotive Systems 2-3-3**  
This course is designed to provide the student with the basics of the modern automobile. It includes the operating principles of two- and four-stroke cycle engines, the combustion process, exhaust emissions, and the different systems that make up today's modern automobile. Emphasis will be placed on system and component identification and function. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

**AUTO 1400 Shop Fundamentals 3-3-4**  
This course introduces the student to the Automotive Service and Repair career field. It includes basic shop organization, automotive terminology, OSHA and Hazardous Communications Act, safety, shop mathematics, measuring systems, fuels and lubricants, the use of publications, common automotive hardware, and cleaning methods. Emphasis will be placed on the proper and safe use and care of hand and power tools, cutting tools, precision measuring devices, diagnostic tools and equipment, electrical test equipment, and other shop equipment.

**AUTO 1402 Basic Electrical and Test Equipment 3-3-4**  
This course will provide the student with a good understanding of basic electrical principles, circuits, and diagrams; wiring repairs; lighting systems; and electrical troubleshooting through the use of hands-on training. Emphasis will be placed on usage and interpretation of common test equipment. The student will also be able to test and diagnose the lead-acid storage battery. Prerequisite or Corequisite: AUTO 1301 and 1400 or consent of the Department Chair.

**AUTO 1405 Automotive Air Conditioning 3-3-4**  
A course designed to provide an understanding of the principles, design, construction, installation, and service procedures involved in automotive air conditioning, with special emphasis on system recharging and service. Prerequisite or Corequisite: AUTO 1400, 1402, and 1411 or consent of the Department Chair.

**AUTO 1406 Engine Tune-Up 2-4-4**  
This course is designed to provide the beginning student with basic automotive skills involved in performing minor engine tune-ups. Emphasis will be placed upon the procedures to diagnose, adjust, and replace electrical, carburetor, and ignition system components. Prerequisites: AUTO 1301 and 1402.

**AUTO 1407 Brake Systems 3-3-4**  
A course designed to provide an understanding of the nomenclature, theory of operation, and service procedures involved in the brake system. The use of the brake drum lathe, bleeder, and other equipment necessary to effect brake repairs will be taught with emphasis on power brake and dual brake systems. Training will also include principles of anti-skid and heavy-duty brake systems. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

**AUTO 1408 Standard Transmissions & Transaxles 3-3-4**  
A course designed to provide an understanding of the function, construction, operation, and maintenance of manual shift transmissions, transaxles, clutches, drive lines, and differentials. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

**AUTO 1411 Automotive Computer Systems 3-3-4**  
This course is designed to provide the student with a basic understanding of computer systems used in the modern automobile. Emphasis will be placed on system and component identification, function, and operating principles. Prerequisite or Corequisite: AUTO 1402 or consent of the Department Chair.

**AUTO 2250 Operational Maintenance 0.5-2-2**  
To familiarize the student with basic theories and principles of operational maintenance of military vehicles.

**AUTO 2251 Power Generator Mechanics Course 1.5-4.5-2**  
This course is designed to teach wheeled-vehicle mechanics the skills necessary to perform organizational maintenance on 1.5 through 10 KW power generators.

**AUTO 2402 Shop Organization and Management 3-3-4**  
A course designed to provide information and actual experiences in shop management, customer relations, warranty provisions, service salesmanship, organization and layout, general business practices and in the use of time, rate, and parts manual. This course places special emphasis on established business principles and preparation for employment. Prerequisite: Sophomore standing.

### **AUTO 2403 Automatic Transmissions & Transaxles 3-3-4**

A study of the theory of operation, construction, and maintenance of automatic transmissions and transaxles including locking torque converters and automatic overdrive. This course emphasizes the diagnosis, repair, and overhaul techniques used in rebuilding transmissions and transaxles. Prerequisite: AUTO 1408 or consent of the Department Chair.

### **AUTO 2404 Ignition, Starting & Charging Systems 3-3-4**

Provides a review of the basic electrical system. Course content includes the ignition system theory and service for the conventional, transistor, and computer-controlled systems. Starting motor and charging systems theory, testing, and service will also be included. Prerequisite: AUTO 1402 and 1411 or consent of the Department Chair.

### **AUTO 2405 Steering and Suspension Systems 3-3-4**

This course is designed to provide the student with an understanding of the function, theory of operation, maintenance, diagnosis, and service procedures involved in the automotive steering and suspension systems. It includes wheels, tires, steering gears and linkages, wheel alignment factors, diagnosis, repair and alignment procedures on live automobiles. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

### **AUTO 2406 Engine Diagnosis and Emission 3-3-4**

A course designed to provide an understanding of engine troubleshooting procedures using conventional test equipment, engine oscilloscopes, exhaust gas analyzers, and computerized engine analyzers. Diagnosis, adjustment, and repair of engine emission controls is included. Prerequisite: AUTO 1301, 1402, 1411, 2404, and 2410 or consent of the Department Chair.

### **AUTO 2408 Advanced Engine Service 3-3-4**

This course covers a brief review of basic engines. Hands-on work will involve valve train and cylinder head service including valve grinding and guide repair. Included in this course will be the procedures necessary for the replacement of an engine short-block assembly including necessary testing and adjustments. Prerequisite: AUTO 1301 or consent of the Department Chair.

### **AUTO 2410 Fuel Systems and Injection 3-3-4**

A course designed to provide an understanding of the principles, design, and operation of automotive fuel systems. Carburetors, fuel pumps, fuel injection, and computer-controlled units will be covered. Hands-on work will include troubleshooting, repair and adjustment of these systems as well as emission control devices. Prerequisite: AUTO 1301, 1402, and 1411 or consent of the Department Chair.

## **(AVMT) Aviation Maintenance Technology**

### **AVMT 1201 Maintenance Publications - G 2-2-2**

The basis of all maintenance is the proper use and interpretation of technical publications. This course deals with Federal Aviation Administration and manufacturers' publications. The student will be given instruction on the privileges and limitations of a mechanic according to FAR Part 65 and will also be given practical work with descriptions of aircraft work performed and the completion of required maintenance forms and records.

### **AVMT 1202 Weight and Balance - G 2-2-2**

Since weight and balance of aircraft are critical areas in maintenance, the student will be instructed on the weighing and computation of weight and balance of an aircraft. This course will also include basic physics principles; basic ground operations; and servicing of aircraft including starting, moving, and securing aircraft and other service procedures.

### **AVMT 1203 Aircraft Drafting - G 2-2-2**

Since the beginning of any aircraft originates on the drafting board, the technician must be able to use drawings, blueprints, diagrams, charts, and graphs. This course prepares the student to draw sketches and finished drawings of repairs and alterations. In addition, instruction will be given on fabrication and installation of rigid and flexible lines and fittings.

### **AVMT 1204 Airframe Materials and Corrosion Control - G 2-2-2**

The course involves the proper use of cleaning and corrosion control materials that are used in aviation. Instruction will include the areas of identifying and selecting appropriate nondestructive testing methods; performing penetrant, chemical etching, and magnetic particle inspection; performing basic heatbreaking processes; identifying and selecting aircraft hardware and materials; identifying and selecting cleaning materials; and actually performing aircraft cleaning and corrosion control.

### **AVMT 1305 Basic Aircraft Electricity - G 2-4-3**

This course is designed to introduce the student to the theory and practical applications of electricity. Topics of instruction include measuring voltage, current, resistance, continuity, leakage, capacitance, inductance and special applications of aircraft electrical circuit problems.

### **AVMT 1306 Aircraft Finishes - A 2-4-3**

This course covers the principles involved in service and repair of wood structures; selecting, testing, inspecting, repairing, and applying materials from fabric to fiberglass. In addition, painting, doping, and applying trim and letters to the aircraft airframe are included.

### **AVMT 1320 A&P Mechanic General Course 3-0-3**

This course introduces an experienced mechanic to the very basics of aircraft maintenance. The course will include applying the principles of mathematics, physics, and electricity to aircraft maintenance; solving weight and balance problems; selecting and using specifications from FAA Regulations; and identifying and properly employing materials and hardware commonly used in aircraft maintenance. Prerequisites: 18 months aircraft maintenance experience and FAA evaluation certification that the student is qualified to take the course to obtain the FAA powerplant or Airframe rating.

### **AVMT 1402 Sheet Metal Structures - A 2-6-4**

This course covers the theory and practical applications of aircraft sheet metal structures. Instructional topics include sheet metal layout, hand forming, machine forming and bending, and the use of conventional and special rivets and fasteners. Inspection techniques and procedures of bonded structures, plastics, honeycomb structures, laminated sections, doors, and aircraft interior furnishings are also covered in the course. Soldering, brazing, gas welding, and arc welding of all materials used in aircraft structures including magnesium, titanium, stainless steel and aluminum are included in this course. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

### **AVMT 2303 Airframe Inspection - A 2-4-3**

The objective of this course is to prepare the student to perform uniform conformity and airworthiness inspections on both rotary and fixed-wing aircraft. This course also covers the alignment check of structures, assembling aircraft, balancing and rigging moveable surfaces, and the jacking of aircraft. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

### **AVMT 2304 Aircraft Fuel Systems - A 2-4-3**

This course covers the theory and practical experiences, inspection, repair, and service of aircraft fuel systems that include fuel dump systems, fluid quantity and pressure indicators, and temperature indicators. Heating, cooling, and pressurization systems and oxygen equipment are also covered. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2305 Aircraft Instrument Systems - A** 2-4-3  
This course is designed to instruct the student in the repair, inspection, service, and installation of heading, speed, altitude, time, temperature, pressure, and position indicating systems; ice and rain control systems; and the maintenance of fire protection systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2306 Engine Electrical Systems - P** 2-4-3  
This course is designed to give instruction in the troubleshooting, repair, installation, and inspection of engine fluid rate of flow meters; temperature, pressure, and RPM indicators; fire detection and extinguishing systems; and the engine electrical systems that include wiring, controls, switches, indicators and protective devices. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2307 Engine Lubrication and Cooling Systems - P** 2-4-3  
This course includes the identification and selection of lubricants as well as the repair, inspection, and troubleshooting of the components. It also covers the theory and practical applications of the repair, inspection, troubleshooting and servicing of cooling exhaust systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2308 Aircraft Airframe Course** 3-0-3  
The Airframe course has been established to teach qualified aircraft mechanics the fundamentals of aircraft airframe maintenance. The course is sequenced to give the student instruction in all areas of aircraft structures and their components. Evaluation examinations will be administered periodically throughout the course. Prerequisite: 18 months aircraft maintenance experience and FAA evaluation certification that the student is qualified to take the course to obtain the FAA Airframe rating and AVMT 1201.

**AVMT 2309 Aircraft Powerplant and Systems** 3-0-3  
The powerplant course has been established to teach qualified aircraft mechanics the fundamentals of aircraft powerplant maintenance. The course is sequenced to give the student instruction in all areas of powerplants and their components. Evaluation examinations will be administered periodically throughout the course. Prerequisite: 18 months aircraft maintenance experience and FAA evaluation certification that the student is qualified to take the course to obtain the FAA Powerplant rating and AVMT 1201.

**AVMT 2402 Hydraulics and Pneumatics - A** 2-6-4  
This course includes the repair, inspection, and servicing of hydraulic and pneumatic power systems. Practical experiences include the inspection, servicing, and repair of landing gear retraction systems, shocks, struts, brakes, wheels, tires, and steering systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2403 Aircraft Electrical Systems - A** 2-6-4  
This course is designed to prepare the student to perform inspection, maintenance, and repair of aircraft electrical systems including wiring, controls, switches, and indicators involved with both alternating and direct current circuits. Also covered are the inspection and repair of the aircraft position and warning systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2404 Powerplant Maintenance Reciprocating Engines - P** 2-6-4  
This course is designed to prepare the student to maintain, overhaul, repair, and inspect reciprocating engines from small, opposed powerplants to large, radial engines. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2405 Engine Fuel Systems - P** 2-8-4  
This course covers the inspecting, repairing, servicing, and troubleshooting of fuel metering systems; fuel system components; engine, ice, and rain control systems; heat exchangers; superchargers; and overhauling carburetors. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2406 Aircraft Propellers - P** 2-8-4  
Propellers are an integral part of the majority of aircraft; therefore, a great deal of study is devoted to this area. This course covers the repair, inspection, service, and troubleshooting of propeller synchronizing and ice controls; propeller control systems; fixed pitch; constant speed; propeller feathering; and governing systems; removal and installation of propellers; balancing propellers; and identifying/selecting proper propeller lubricants. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

**AVMT 2407 Powerplant Maintenance Turbine Engines - P** 2-6-4  
Designed to prepare the student to maintain, repair, rig, overhaul, and inspect turbine engines. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

## (BIOL) Biology

**BIOL 1308 Biological Science** 3-0-3  
A study of selected topics of biological science for the non-science major. Topics include the cell concept, systems of the human body, aging, and introduction to genetics, evolution, and ecology.

**BIOL 1408 General Biology I** 3-3-4  
Fundamental principles of living organisms at the cellular level. Includes cell structure and function, photosynthesis/cellular respiration, mitosis/meiosis, DNA, Mendelian and modern genetics, bacterial structure and gene control, population genetics.

**BIOL 1409 General Biology II** 3-3-4  
Aspects of systematics, survey of plant kingdom (structure/functioning/life cycles), survey of the animal kingdom, structure and functioning of animal systems, aspects of ecology.

**BIOL 1411 General Botany** 3-3-4  
The study of structure and function of plant cells, tissues, and organs. An evolutionary survey and life histories of the following representative groups: algae, fungi, mosses, liverworts, ferns, and seed-producing organisms. Plant reproductive and functional interactions with their environment and with humans. Selected laboratory exercises will complement the lecture topics. Completion of BIOL 1408 is recommended.

**BIOL 1413 General Zoology** 3-3-4  
A survey of important invertebrate and vertebrate groups of the animal kingdom emphasizing relevant biological concepts. Includes laboratory experiments and dissections; lifestyles, structures, and classification of protozoa, sponges, jellyfish, worms, molluscs, arthropods, echinoderms, and vertebrates. Completion of BIOL 1408 is recommended.

**BIOL 1424 Plant Taxonomy** 3-3-4  
An introduction to the identification, classification, and evolutionary relationships of vascular plants with emphasis on flowering plants. The importance of herbaria, collection techniques, and construction and use of taxonomic keys will be included in both the lecture and laboratory. Prerequisite: BIOL 1411.

**BIOL 2401 Human Anatomy** 3-3-4  
Principles of human anatomy designed for students interested in medical careers. Laboratory includes anatomical models and displays, audio-visual materials, microscopy, and specimen dissection in the lab. A one-semester course in Biology is a preferred prerequisite.

**BIOL 2402 Human Physiology 3-3-4**

Fundamental study of the chemical interrelationships of human systems. Digestion, respiration, excretion, muscular activities, reproduction, and metabolism are included. Basic physiological instruments and techniques are included in the lab. Prerequisite: BIOL 2401 and an introduction to chemistry.

**BIOL 2413 Biological Entomology (AGRI 2313 Entomology) 3-3-4**

Study of insects, including life cycle, morphology, physiology, ecology, taxonomy, population dynamics, genetics, and ecosystem relations. Includes instruction in the biological and chemical control of insects.

**BIOL 2416 Human Genetics 3-3-4**

The study of the physical basis of inheritance and the laws of heredity and variations. Genetic problems are emphasized. Human genetic dysfunctions and modern research in genetic control are discussed. Prerequisite: BIOL 1408 or consent of the Department Chair.

**BIOL 2421 Microbiology 3-3-4**

Fundamental principles of microbiology; includes study of morphology, physiology, and classification of microbes and their relationships with soil, food, water, disease, and immunology. Designed for nursing and all health-related majors. Prerequisite: Any college-level Biology course.

**BIOL 2428 Vertebrate Zoology 3-3-4**

Structure, development, physiology, and natural history of the vertebrate animals. Emphasis will be placed on North American forms. Field trips are required at minimal student expense. Labs include dissections. Prerequisites: BIOL 1408, 1409, 1413 or consent of the Department Chair.

**(BUSI) Business****BUSI 1301 Introduction to Business 3-0-3**

Provides overall picture of business operations. Includes analysis of specialized fields within business organizations and identifies the role of business in modern society.

**BUSI 1307 Personal Finance 3-0-3**

Personal and family account budgets, budgetary controls, bank accounts, charge accounts, borrowing, investing, insurance, standards of living, renting, home ownership, wills, and trust plans.

**BUSI 1372 Consumer Economics 3-0-3**

A study of consumer goods and services as related to the home/family and the problems and pitfalls associated therewith. This includes a study of family purchasing, advertising, commodity information, sales approaches from a consumer viewpoint, and sources of advice and counseling. This course allows the supervisor to better advise subordinates on economic problems.

**(CDEC) Early Childhood Professions****CDEC 1195 Special Topics in Child Care (CHDV 2101) 1-0-1**

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.

**CDEC 1303 Family and the Community (CHDV 1327) 2-2-3**

A study of the relationship between the child, the family, the community, and early childhood educator, including a study of parent education, family and community lifestyles, child abuse, and current issues. The student will examine research on parenting styles; discuss issues relating to families and communities; discuss literature relating to diverse lifestyle and multi-cultural influences; examine research on abuse and neglect as it occurs in the family. The student will identify effective parenting techniques; identify characteristics of functional and dysfunctional families; demonstrate the ability to communicate and interact with parents and families; recognize signs of abuse and neglect; describe ways to deal effectively with abusive behaviors; and develop activities to enhance understanding of diverse lifestyle and multi-cultural influences. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include working with children with different cultures and backgrounds.

**CDEC 1311 Introduction To Early Childhood Education (CHDV 1301) 2-2-3**

An introduction to the profession of early childhood education, focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues. The student will discuss the contributions of key historical and contemporary theorists to the field of early childhood education, explain the features of the developmentally appropriate program for young children, define development and define each of the four basic developmental areas, describe the types of early childhood programs, and analyze future trends and issues of the early childhood profession. The student will demonstrate an understanding of the characteristics and developmental stages of an early childhood professional. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include working in the lab center.

**CDEC 1313 Curriculum Resources for Early Childhood Programs (CHDV 1303) 2-2-3**

Fundamentals of curriculum design and implementation in developmentally appropriate programs for young children. The student will define and describe developmentally appropriate practices; describe the process of curriculum development beginning with goals, objectives and learning activities, and culminating in assessment; and develop guidelines for creating developmentally appropriate learning (indoor/outdoor) environments. The student will select, plan, and implement developmentally appropriate activities for young children; apply an understanding of the teacher's role in the early childhood classroom; and prepare a developmentally appropriate schedule including routines and transitions. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include developing and implementing curricula.

**CDEC 1318 Nutrition, Health and Safety  
(CHDV 1324)**

**2-2-3**

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 implication. Integration of these principles will be applied in a variety of settings. The student will demonstrate knowledge of the principles, nutrition assessment, activities, and regulatory requirements of nutrition; describe community health problems, universal health precautions, environmental and personal hygiene and legal implications regarding health; and evaluate the regulations, procedures, and environment regarding safety. The student will demonstrate skills in computation, record keeping, referrals, and resources. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include meal preparation and safety and health surveys.

**CDEC 1319 Child Guidance (CHDV 1309)**

**2-2-3**

An exploration of common behavior problems of young children in child care settings. Emphasis on positive guidance techniques for effective behavior management. Practical application through direct participation in child care setting. The student will summarize general theories related to child guidance and explain how guidance teaches young children autonomy and self-discipline, while promoting development of positive self-concept and prosocial behaviors. The student will apply appropriate guidance methods for specific situations relating to children's behaviors and demonstrate skills in supporting children to resolve conflicts. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice guidance techniques in early childhood settings.

**CDEC 1354 Child Growth and Development  
(CHDV 1310)**

**2-2-3**

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. The student will demonstrate knowledge of principles of growth and development; normal developmental stages in physical, cognitive, social, and emotional domains; major theories of development, i.e., behaviors, cognitive, language acquisitions, developmental; the impact of developmental processes on early childhood practices; types and techniques of objective observation; the importance of play in development; and biological and environmental influences on growth and development. The student will demonstrate skills in the practical application of developmental principles and theories, objective observation techniques, and recognition of normal growth and developmental patterns. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include observation of children at various stages of development.

**CDEC 1356 Emergent Literacy for Early Childhood  
(CHDV 1304)**

**2-2-3**

An exploration of principles, methods, and materials for teaching young children language and literacy through a play-based, integrated curriculum. The student will describe the role of the teacher in promoting emergent literacy. Analyze various theories of language development, and sequence the stages of emergent literacy. The student will create print rich environment for young children and select and share appropriate literature with young children. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include using environmental and developmentally appropriate activity to support literacy learning.

**CDEC 1357 Math and Science for Early Childhood  
(CHDV 2305)**

**2-2-3**

An exploration of principles, methods, and materials for teaching young children math and science concepts through discovery and play. The student will relate the sequence of cognitive development to the acquisition of math and science concepts and describe the scientific process and its application to the early childhood classroom. The student will develop teacher strategies which promote thinking and problem-solving skills in young children, utilize observation and task assessment as a basis for planning discovery experiences for the individual child, and select and/or prepare developmentally appropriate materials to support the attainment of math and science concepts. Thirty hours of field experience in child-related settings are required beyond the normal class hours.

**CDEC 1358 Creative Arts for Early Childhood  
(CHDV 1305)**

**2-2-3**

An exploration of principles, methods, and materials for teaching young children music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking. The student will describe the developmental sequences for the creative arts and describe how process-oriented experiences enhances creativity/divergent thinking. The student will demonstrate the ability to encourage divergent thinking within the classroom through open-ended questioning techniques and plan and implement developmentally appropriate activities for music, movement, visual arts, and dramatic play. Student will demonstrate knowledge of audio-visual equipment and how to construct simple training aids such as bulletin boards and mobile. Laboratory experiences include planning and implementing activities that promote creativity in young children.

**CDEC 1359 Children with Special Needs  
(CHDV 2301)**

**2-2-3**

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. The student will demonstrate knowledge of causes, incidence, and characteristics of exceptionalities related to cognitive, physical, social, and emotional domains of development; current terminology and practices for educational intervention; availability and accessibility of appropriate resources; accommodation in inclusive early childhood setting; legal mandates and their impact on the early childhood practices and environment; and the role of advocacy for children with special needs and their families. The student will demonstrate skills in recognition of indicator of exceptionalities; practical application of techniques for educational intervention and accommodation; identification of appropriate resources and referral practices for individual children and families; interpretation of the impact of legal mandates on early childhood programs; and advocating for children with special need and their families. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice skills with exceptional children.

**CDEC 1371 Physical Development and Disorder in  
Children (CHDV 1306)**

**2-2-3**

This course is designed for paraprofessionals working in integrated early childhood settings. Roles and responsibility of the paraprofessional, including IEP and ISFP lesson plan teaching strategies, and hands-on training in physical management and care skills of the child with special needs are emphasized. Instruction in basic sign language, and an overview of current learning technologies to assist the child with disabilities, is included. Emphasis is placed on methods and materials for promoting activities of daily living. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice skills with exceptional children.

**CDEC 1372 Techniques for Child Guidance for the  
Special Child (CHDV 1307)**

**2-2-3**

This course provides an examination of theoretical approaches to guidance strategies applicable to the integrated early childhood setting; emphasis is placed on strategies for facilitating emotional growth in individual children and social integration of all children in inclusive settings; includes activity planning to achieve IEP and ISFP goals for a variety of children with disabilities and children without disabilities. Features experiences in mastering observation techniques and assisting in assessment procedures; ethical problem solving; and teamwork skills in group management. Positive guidance techniques are emphasized. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice skills with exceptional children.

**CDEC 1373 Management: Intergenerational Professions (CHDV 1328) 2-2-3**

This course focuses on program goals, policies and procedures, and licensing standards for child and adult services. It includes types of settings and career opportunities related to child and adult services; appropriate workplace ethics; occupational health and safety practices; communicating effectively on the job, records maintenance; daily scheduling; and current issues and legislation relating to child care, elderly care, and adult dependent care. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunities to practice techniques in early childhood settings.

**CDEC 1374 Preschool Age (CHDV 1408) 2-2-3**

This course centers on developmentally appropriate practice during the play years (ages 3-5). It includes developing and designing interest centers and environments for discovery learning; scheduling and planning age appropriate activities; and writing daily and weekly activities and objectives. Staff team building and ethical problem solving are embedded in course objects. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunity to practice skills with preschool age children.

**CDEC 1391 Special Topics in Family Day Care Homes (CHDV 2410) 2-2-3**

This course addresses the unique curriculum planning needed in group home-based care centers and centers serving less than 10 children; includes strategies for developmentally appropriate practice for mixed age groups, planning the environment, and ways to use mixed-age grouping to the children's advantage. Thirty hours of field experience in child related settings are required beyond the normal class hours. Laboratory experience includes working with young children.

**CDEC 1393 Special Topics in Family Living and Parenthood (CHDV 2302) 2-2-3**

Topics addresses 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 needs and business and industry trends. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include opportunity to practice guidance techniques in early childhood settings.

**CDEC 2321 The Infant and Toddler (CHDV 1406) 2-2-3**

A study of appropriate infant and toddler (birth to 3 years) programs, including an overview of development, quality care giving routines, appropriate environment, materials and activities, and teaching/guidance techniques. The student will demonstrate a knowledge of principles of quality infant/toddler care-giving; elements of appropriate indoor and outdoor environments; developmentally appropriate materials, activities, and teaching/guidance techniques; and normal growth and development of children from birth to 3 years. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include assessing and implementing infant and toddler activities.

**CDEC 2326 Administration of Programs for Children I (CHDV 2303) 2-2-3**

A practical application of management procedures for early child care and education programs, including a study of operating, supervising, and evaluating programs. Topics on philosophy, types of programs, policies, fiscal management, regulations, staffing, evaluating, and communication. The student will employ knowledge of programs, philosophies, curriculums, and budget basics; develop goals and objectives, written/oral communications, parent communication; and interpret and supervise regulations, policies, staffing, and evaluating. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include observing the operation of a child care agency.

**CDEC 2328 Administration of Programs for Children II (CHDV 2304) 2-2-3**

An in-depth study of the skills and techniques in managing early child 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. The student will demonstrate skills in fiscal planning and analysis; legal and ethical issues; personnel management and team building; advocacy and professionalism; parent education and partnership; and technical applications in programs. The student will utilize skills in speaking, writing, computation, and computer utilization. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experiences include observation of the operation of child care programs.

**CDEC 2371 The School Age Child (CHDV 2409) 2-2-3**

A study of appropriate age (5 to 13 years) programs, including an overview of development, appropriate environments, materials and activities, and teaching/guidance techniques. The student will demonstrate knowledge of principles of quality school age programs; elements of appropriate indoor and outdoor environments; developmentally appropriate materials, activities, and teaching/guidance techniques; and normal growth and development of the school age child. The student will demonstrate skills in implementing principles of quality programming; designing appropriate indoor and outdoor environments; selecting appropriate materials and activities; practicing teaching/guidance techniques and activities for school age children; and applying growth and development principles to school age setting. Thirty hours of field experience in child-related settings are required beyond the normal class hours. Laboratory experience include planning and implementing school-age activities

**CDEC 2371 Program and Planning Implementation (CHDV 2314) 2-2-3**

This course is intended to motivate and inform care-givers about interactions between children and the elderly in a general way. It includes guidelines for developing an Intergenerational program, goals and objectives, appropriate settings for activities, planning and implementing intergenerational activities, and effective techniques in evaluating intergenerational programs.

**CDEC 2383 Practicum (Field Experience) Early Childhood Professions (CHDV 2402) 1-2-3**

Topic addresses 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. Two hundred hours of field experience in child-related settings are required beyond the normal class hours.

**(CHEM) Chemistry**

**CHEM 1406 Introduction to General Chemistry 3-3-4**

This course is designed primarily to satisfy the requirements of nursing students seeking a B.S. Degree or background for physiology. The course covers the fundamentals of general and descriptive chemistry with applications from medicine, modern living, agriculture, etc. It is also suitable for non-science majors who need a laboratory science credit. It also serves as background for those who have no chemical background.

**CHEM 1407 Physiological Chemistry 3-3-4**

A study of organic and physiological chemistry for nursing students interested in the processes of life. Basic principles, nomenclature, principal reactions and methods of synthesis, and the major classes of physiologically important compounds are studied. Prerequisite: CHEM 1406.

**CHEM 1411 General Chemistry I 3-4-4**

The first of two courses for science-related majors, this course covers the basics of atomic and molecular structure, bonding, states of matter, solutions, and some descriptive chemistry. Emphasis is placed on solutions of chemical problems. Prerequisite: MATH 1314 or consent of the Department Chair.

**CHEM 1412 General Chemistry II****3-4-4**

The second of two courses for science-related majors, this course covers equilibrium processes, acid-base concepts, elementary thermodynamics and kinetics, electrochemistry, nuclear chemistry, and descriptive chemistry of some families of elements. Prerequisite: CHEM 1411.

**CHEM 2423, 2425 Organic Chemistry I & II****3-4-4**

A mechanistic approach is used to provide a thorough foundation in organic chemistry. The student is introduced to planning a synthesis in lecture. The laboratory introduces students to basic techniques, synthesis of compounds and instrumental analysis. Designed for science majors and minors. Prerequisites for CHEM 2423: CHEM 1411 and 1412 or the consent of the Department Chair. Prerequisite for CHEM 2425: CHEM 2423.

**(CMET) Computer Electronics Technology****CMET 1400 Electronics & Computer Skills****3-3-4**

A study of modern electronic construction techniques, including the use of hand tools and fabrication equipment. The course includes high-reliability soldering, the production of printed circuit boards, cable and harness making, wire wrapping techniques, and other related skills.

**CMET 1401 Digital Circuits****3-3-4**

A study of the basic gates and gating networks used in digital circuits and an intensive study of Boolean Algebra, as well as the theory and operation of flip-flops, registers, and counter circuits. The course also covers numbering systems, arithmetical circuitry, and elements of control circuits.

**CMET 1402 Computer Systems****3-3-4**

An introductory course covering the setup, operation, and basic preventive maintenance of the personal computer system. This course will include an introduction to some of the basic software packages useful to the first-time computer owner.

**CMET 1403 Computer Systems and Operational Programming****3-3-4**

The study of the theory of the operation of several computer systems, to include instructions, an introduction to their logic diagrams, circuit schematics, programming as a troubleshooting tool, and operational characteristics.

**CMET 1404 Fundamentals of Robotics****3-3-4**

An introduction to terminology, theories, and technology involving all types of robotics and tendons, both general and industrial oriented. Prerequisites: ELTE 1401, CMET 1401. Corequisite: ELTE 1403.

**CMET 1405 Local Area Networks****3-3-4**

This course covers system design, configuration, operation, management, and troubleshooting of local and wide area networks.

**CMET 1409 CRT Systems****3-3-4**

A study of the vertical and horizontal scanning circuits, video amplifiers, and other related circuits encountered in the most common video display systems. The course includes theory of circuit operation and practical laboratory exercises in troubleshooting. Prerequisite: ELTE 1403.

**CMET 2200 Thru Hole Assembly-Advanced****1-3-2**

An advanced course offered at a PACE certified training center by a PACE certified instructor, in the art of assembly, rework, and repair of printed circuit boards in thru-hole technologies. The course covers the assembly, removal, and replacement of all types of PC-board-mounted electronic devices. Successful completion results in the student being certified by PACE in Advanced Thru-Hole Assembly and Repair.

**CMET 2201 Surface Mount Assembly-Advanced****1-3-2**

An advanced course offered at a PACE certified training center by a PACE certified instructor, in the art of assembly, rework, and repair of printed circuit boards in surface mount technologies. The course covers the assembly, removal, and replacement of all types of pc-board-mounted electronic devices. Successful completion results in the student being certified by PACE in Advanced Surface Mount Assembly and Repair.

**CMET 2400 Assembly, Repair and Rework****3-3-4**

An advanced course offered at a PACE certified training center by a PACE certified instructor, in the art of assembly, rework, and repair of printed circuit boards in thru-hole and surface mount technologies. The course covers the assembly, removal, and replacement of all types of pc-board-mounted electronic devices. Successful completion results in the student being certified by PACE in both Advanced Thru-Hole and Advanced Surface Mount Assembly and Repair. Prerequisite: CMET 1400 or consent of the Department Chair.

**CMET 2402 Computer Circuit Analysis****3-3-4**

A comprehensive study of the clock and pulse generation circuit, waveshaping circuits, trigger and control circuits, and synchronization and counting circuits, as well as other circuits used in modern-day computers. Prerequisites: CMET 1401 and 1403.

**CMET 2404 Computer System Diagnosis and Maintenance****3-3-4**

The operation, preventive maintenance procedures, and troubleshooting of modern-day computer equipment. The study of advanced diagnostic programming including finding, documenting, and repairing computer malfunctions. The course gives the student the much needed practical experience that can only be gained in a live computer atmosphere. Prerequisite: CMET 2402 or equivalent.

**CMET 2405 Tendon Control and Implementation****3-3-4**

A study in the use of microprocessors to control both fluidics and pneumatic systems used in robotics and tendon-type systems, as well as the study of AC and DC motors and motor control for movement and positioning. Prerequisite: CMET 1404.

**CMET 2406 Robotics Implementation****3-3-4**

A study in data acquisition, handling, and conversion for use in movement, detection, and voice synthesis in advanced robotics systems. Prerequisite: CMET 2405.

**CMET 2408 Digital Communications****3-3-4**

This course is designed to allow the student to become proficient in all aspects of digital communications. It will begin with a concentrated investigation of digital modulation and digital transmission. The most common modulation schemes used in modern systems--FSK, PSK, and Quadrature Amplitude Modulation (Eight and Sixteen)--will be covered in depth. Also included is a study of the numerous data communications concepts including transmission methods, circuits, topologies, error control mechanisms, and data formats. A study of digital transmissions techniques including PCM, MPX sampling, encoding, and compounding; time-division multiplexing, adaptive delta modulation PCM, and differential PCM are also covered. The North American Digital Hierarchy for digital transmissions is outlined including line encoding schemes, error detection/correction methods, and synchronization techniques. Prerequisites: CMET 1401 and ELTE 1403.

**CMET 2410 Advanced Consumer Servicing****3-3-4**

This course includes the maintenance, alignment, and servicing of VCRs, camcorders, hi-fi stereo sound systems and equipment. Prerequisite: CMET 1409.

**CMET 2411 Theory of Interface Devices****3-3-4**

A study of the microprocessor and its interface with external memory, enhancements, and devices that allow the processor to be a complete computer system. The course will also include the operation of these peripheral devices. Prerequisites: CMET 1403 and ELTE 1403.

## (COMM) Communications

See also degree plan Journalism

### **COMM 1307 Communications Media** 3-0-3

Instruction in mass media of the modern world. A survey of all mass media, their purposes, and their methods of operation.

### **COMM 2305 Editing, Layout and Design and Headline Writing** 3-2-3

Enables students to develop an understanding of the newsroom organization and the entire news/editorial process. Students perform copy editing for errors of fact, interpretation, and grammar. Emphasis is on developing a regard for accuracy and fairness in the editing and design process. Prerequisite: COMM 2311. Working on the staff of the school newspaper is a requirement for this course.

### **COMM 2311 News Gathering and Reporting I** 3-2-3

Instruction in the fundamental news gathering and writing techniques, interviewing techniques, and discussion of news sources and values. Typing required. Working on the staff of the school newspaper is a requirement for this course.

### **COMM 2315 News Gathering and Reporting II** 3-2-3

Emphasizes advanced reporting techniques and styles, such as writing interpretive and specialized news stories, features, and opinion pieces. Lectures in specialized areas by professional reporters. Prerequisite: COMM 2311. Working on the staff of the school newspaper is a requirement for this course.

## (COSC) Computer Science

### **COSC 1100 Special Topics** 0-3-1

Recent developments and topics of current interest. May be repeated when topics vary.

### **COSC 1300 Computer Information Processing** 2-1-3

An up-to-date survey of computer hardware and software systems and developments that will provide the basis for further advancements in information processing. Provides a comprehensive overview of the computer--what it is, what it can and cannot do, how it operates, and how it may be instructed to solve problems. Covers terminology and examines the application of computers in a broad range of organizational settings and social environments. An overview of BASIC programming is provided. Basic use of computers for non-computer majors.

### **COSC 1400 Computer Science Fundamentals** 3-3-4

Provides the student with fundamental skills needed in designing computer programs. Focus will be on problem analysis and developing algorithms for the step-by-step solution to problems. Students will learn to use an on-line editor to enter programs via a terminal in a hands-on environment. A high-level language will be used for programming and debugging.

### **COSC 1401 Computer Operations** 3-3-4

Provides the student with knowledge of duties and responsibilities of a computer operator. Training is provided to develop the student's ability to work in a computer center.

### **COSC 2110 Topics in Computer Science Laboratory** 0-3-1

Laboratory for COSC 2310 when topic has a required laboratory.

### **COSC 2310 Topics in Computer Science** 3-0-3

Study of recent developments and topics of current interest in computer science. Prerequisite: 12 semester hours in Computer Science courses or the consent of the Department Chair.

## (CRIJ) Criminal Justice

### **CRIJ 1201 Defensive Tactics** 1-2-2

This course is designed to provide the student with defensive and protective philosophies to better protect the public and criminal justice personnel against illegal force. Self-defense techniques, safe arrest procedures, citizen contact, and proper prisoner transportation techniques, along with humane methods of handling disturbed persons, will be presented. The legal and humane use of limited force will be stressed at all times.

### **CRIJ 1301 Introduction to Criminal Justice** 3-0-3

History and philosophy of criminal justice and ethical considerations. Crime defined, its nature and impact. Introduction and career orientation to the multifaceted agencies involved in the administration of criminal justice: law enforcement, courts, prosecution and defense, probation and parole, and corrections.

### **CRIJ 1302 Criminal Investigation I** 3-0-3

Investigative theory, collection, and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences, and case and trial preparation.

### **CRIJ 1303 Legal Aspects of Law Enforcement** 3-0-3

Police authority, responsibilities, constitutional constraints, law of arrest, search and seizure, police liability, and examples of case law that currently affect police decisions will be reviewed.

### **CRIJ 1304 The Courts and Criminal Procedures** 3-0-3

The judiciary in the criminal justice system, structure of the American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence and sentencing.

### **CRIJ 1305 Traffic Law** 3-0-3

Study of laws pertaining to the control and enforcement of vehicle traffic in the context of Texas traffic laws. Provides knowledge of traffic court procedures and testimony. Study of the professional approach in dealing with traffic law violators, and the officer's role in accident prevention and investigation.

### **CRIJ 1306 Correctional Systems and Practices** 3-0-3

Corrections in the criminal justice system, organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, current and future issues.

### **CRIJ 1307 Crime in America** 3-0-3

American crime problems in historical perspective, social and public policy factors affecting crime: impact and crime trends, social characteristics of specific crimes, and crime prevention.

### **CRIJ 1308 Fundamentals of Criminal Law** 3-0-3

A study of the nature of criminal law, philosophical and historical development, major definitions and concepts, classifications of crime, elements of crime, penalties of crime using Texas statutes as illustrations, and criminal responsibility.

### **CRIJ 1309 Police Systems and Practices** 3-0-3

Analyses of the police profession, organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues facing police agencies.

### **CRIJ 1310 Criminal Investigation II** 3-0-3

Modern methods and skills required for criminal investigation including discovery methods, developing and lifting latent fingerprints, criminal scene sketches, the use of plaster and silicone rubber for reproducing evidence at the crime scene, use of modern investigation aids, and techniques of criminal interviews. Prerequisite: CRIJ 1302.

- CRIJ 1311 Basic Polygraph Techniques 3-0-3**  
Designed to orient law enforcement students on the basics of polygraph techniques as they apply to case research and preparation, pretest procedures, polygraph usage in criminal investigations, legality concerning polygraph, and avenues of a polygraphic career. Prerequisite: CRIJ 1302, 1303, or 1304.
- CRIJ 1312 Commissioned Security Officer Course 3-0-3**  
This course is designed to have the student meet the requirements specifically identified in the state of Texas Commissioned Security Officer Training Manual and the provisions of the Private Investigators and Private Security Agencies Act, Article 4413 (29bb) V.A.C.S. as amended.
- CRIJ 1314 Community Resources in Corrections 3-0-3**  
An introductory study of the role of the community in corrections, community programs for adults and juveniles, administration of community programs, legal issues, and future trends in community treatment.
- CRIJ 2101 Emergency Medical Aid 1-1-1**  
This course focuses on the first aid fundamentals that will be helpful to patrol officers in the event of a first aid emergency situation. Procedures recommended by the American Red Cross will be used as guidelines for this course.
- CRIJ 2201 Firearms 1-2-2**  
This course is designed to introduce the student to the skills and techniques of firearms used in the protection of the public and criminal justice personnel. Students will fire various weapons under precision and police combat conditions. The importance of safe weapons handling and the danger of not adopting a mature attitude towards firearms will be stressed at all times. The intelligent, legal, and moral use of police firearms will be emphasized at all stages of teaching and firing.
- CRIJ 2301 Probation and Parole 3-0-3**  
Development, organization, operation, and results of systems of probation and parole as substitutes for incarceration. Role of probation and parole officers and their function within the entire criminal justice system are examined.
- CRIJ 2303 Criminal Justice Seminar 3-0-3**  
A problems course dealing with current criminal justice trends, issues, and literature. Prerequisite: Consent of the Department Chair. This course may be repeated for credit when course topics deal with different problems and issues.
- CRIJ 2304 Juvenile Procedures 3-0-3**  
The organization, functions, and jurisdiction of juvenile agencies; processing and detention of juveniles; case disposition; juvenile statutes; and court procedures.
- CRIJ 2306 Traffic Planning and Administration 3-0-3**  
This course consists of the application of traffic problems from the administrative point of view including traffic engineering, education, and enforcement at the supervisory level.
- CRIJ 2307 Penology (Jail Operation and Management) 3-0-3**  
A survey of the basic concepts of penal and correctional rationale as employed by criminal justice administrators. An overview of the operation and management principles of the institutional setting will be examined in depth.
- CRIJ 2308 Patrol Administration 3-0-3**  
Discussion of the administration of surveys, special problems arising while the officer is on patrol, improvement in patrol methods, observation of persons and things, preventive techniques, methods of handling complaints, and the development of contacts.

- CRIJ 2310 Correctional Control and Administration 3-0-3**  
The course prepares the student to perform supervisory functions related to control of prisoners and contraband, segregation and accountability of prisoners, procedures required at correctional facilities, emergency measures, prisoner privileges, and the records and reports of the detention center.

- CRIJ 2311 Advanced Security Officer Training 3-0-3**  
This course is designed to provide the student with an increased working knowledge of security principles and procedures. The student will become familiar with each phase of security. Emphasis will be placed on the security problems as seen through the eyes of a security supervisor.

### **(DFTG) Computer-Aided Drafting and Design**

- DFTG 1391 Architectural Blueprint Reading 2-2-3**  
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.
- DFTG 1405 Technical Drafting (DRDS 1405) 3-3-4**  
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.
- DFTG 1409 Basic Computer-Aided Drafting (DRDS 1410) 3-3-4**  
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. Prerequisites: Second-semester Freshman standing in the Drafting Program and consent of the Department Chair.
- DFTG 1417 Architectural Drafting - Residential (DRDS 2402) 3-3-4**  
Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structure with emphasis on light frame construction methods. Prerequisite: Sophomore standing in the Drafting Program.
- DFTG 1452 Intermediate Computer-Aided Drafting (DRDS 2411) 3-3-4**  
A continuation of practices and techniques used in basic computer-aided drafting emphasizing hatched files, scripted files, customized program menus, and extracted attributes. Introduced to three-dimensional drafting. Prerequisite: DFTG 1409 and consent of the Department Chair.
- DFTG 1456 Descriptive Geometry (DRDS 1406) 3-3-4**  
Examination of the graphical solution to problems involving points, lines, and planes in space. Prerequisite: ENGR 1304 or DFTG 1405.
- DFTG 1458 Electrical/Electronics Drafting (DRDS 2403) 3-3-4**  
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. Prerequisite: Sophomore standing in the Drafting Program.
- DFTG 1460 Pipe Drafting (DRDS 2401) 3-3-4**  
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 isometries. Prerequisite: Sophomore standing in the Drafting Program.

**DFTG 1464 Topographical (DRDS 2405) 3-3-4**

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. Prerequisite: Second semester Sophomore standing in the Drafting Program.

**DFTG 1468 Technical Illustration (DRDS 1402) 3-3-4**

Topics include pictorial drawing including isometrics, obloquies, perspectives, charts, and graphs, shading, transfer lettering, and air brush work; and use of different media including pencil and ink. Prerequisite: ENGR 1304, DFTG 1405, or concurrent enrollment.

**DFTG 1471 Industrial Practice (DRDS 2406) 3-3-4**

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.

**DFTG 2402 Machine Drawing (DRDS 1403) 3-3-4**

Production of detail and assembly drawings of machines, threads, gears, cams, tolerances and limit dimensioning, surface finishes, and precision drawings. Prerequisites: ENGR 1304 or DFTG 1405, ENGR 1305 or DFTG 1456, or concurrent enrollment.

**DFTG 2410 Structural Drafting (DRDS 1404) 3-3-4**

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 American Institute of Steel Construction, including units on concrete detailing conforming to American Concrete Institute standards. Prerequisite: ENGR 1304 or DFTG 1405, or concurrent enrollment.

**(DIEM) Diesel Mechanics****DIEM 1301 Diesel Engine Fundamentals 2-3-3**

This course is designed to provide the student with a working knowledge of the fundamentals of the diesel engines. The development, uses, advantages/disadvantages, design, components, operating principles (2- and 4-stroke cycle), diesel fuels, and the combustion process and exhaust emissions will be covered. Emphasis will be placed on operating principles and component function. The student will perform preoperational services, start and stop a diesel engine, and identify engine components and systems. Prerequisite or Corequisite: INDU 1400.

**DIEM 1404 Standard Power Trains 3-3-4**

This course is designed to provide the student with a working knowledge of standard power trains. Theory of gears and torque, operating principles, troubleshooting and service of clutches, standard transmissions and transfer cases, drive lines, differential carriers and axles will be covered. Emphasis will be placed on operating principles, components and service. The student will disassemble, clean, inspect, and reassemble clutches and transmissions. Prerequisite or Corequisite: INDU 1400.

**DIEM 1405 Diesel Engine Auxiliary Systems 3-3-4**

This course is designed to provide the student with a working knowledge of diesel engine air induction and exhaust systems, cooling systems and lubrication systems. System design, operating principles, components, test equipment, and service will be covered. Emphasis will be placed on turbochargers, blowers, troubleshooting, component removal and replacement, test equipment and systems testing. The student will troubleshoot, test, remove, repair, and replace components of auxiliary systems. Prerequisite or Corequisite: INDU 1400 and DIEM 1301.

**DIEM 1406 Diesel Starting and Charging Systems 3-3-4**

This course is designed to provide the student with a working knowledge of diesel engine starting and charging systems. Principles of electricity, system design, operating principles, components, test equipment, and service will be covered. Emphasis is placed on basic electricity, troubleshooting, component removal and replacement, and systems testing. The student will troubleshoot, test, remove, repair, and replace components of starting and charging systems. Prerequisite or Corequisite: INDU 1400, DIEM 1301 and DIEM 1405.

**DIEM 2400 Hydraulic Systems Fundamentals and Service 3-3-4**

This course is designed to provide the student with a working knowledge of hydraulics. Hydraulic principles, pumps, valves, circuits, fluids, cylinders, and troubleshooting will be covered. Emphasis will be placed on hydraulic principles, basic control systems, and troubleshooting. The student will disassemble, clean, inspect, and reassemble hydraulic pumps, valves, and cylinders. The student will use hydraulic trainers to perform numerous practical exercises dealing with hydraulic principles, control systems, and troubleshooting. Prerequisite or Corequisite: INDU 1400.

**DIEM 2403 Diesel Engine Overhaul 3-3-4**

This course is designed to provide the student with a working knowledge of diesel engine overhaul procedures. Engine disassembly, cleaning component inspection and measurements, special tools, reassembly, basic tune-up and run-in will be covered. Emphasis will be placed on component inspection and measurement and basic tune-up and run-in. The student will overhaul a diesel engine. Prerequisite: All DIEM courses or consent of the Department Chair.

**DIEM 2404 Automatic Power Trains 3-3-4**

This course is designed to provide the student with a working knowledge of automatic power trains. Operating principles, troubleshooting and service or torque converters, transmissions, retarders and hydrostatic drives will be covered. Emphasis will be placed on torque converter and transmission service. The student will disassemble, clean, inspect, test, and reassemble an automatic transmission. Prerequisites: DIEM 2400 and DIEM 1404 or AUTO 1408.

**DIEM 2405 Advanced Diesel Engine Service 3-3-4**

This course is designed to provide the student with a working knowledge of diesel engine service procedures. Troubleshooting and diagnostics test equipment, fuel injection pump and service tune-up, governors, fuel pump and injector timing, and valve adjustment will be covered. Emphasis will be placed on tune-up, governor and rack adjustment, valve timing, and fuel system service. The student will perform tune-ups on various diesel engines, remove and install fuel injection pumps and injectors, and adjust governors. New service and product update topics may be presented in this course. Prerequisites: DIEM 1301, 1405, 1406, 2406, and 2407.

**DIEM 2406 Diesel Fuel Injection Systems 3-3-4**

This course is designed to provide the student with a working knowledge of diesel engine fuel systems. System designs, operating principles, troubleshooting and test equipment will be covered. Emphasis will be placed on test equipment and fuel system service. The student will diagnose and repair fuel system problems. Prerequisite: DIEM 1301.

**DIEM 2407 Diesel Engine Cylinder Head Service 3-3-4**

This course is designed to provide the student with a working knowledge of diesel engine cylinder head service. Design, component testing, measurements, test equipment and service equipment will be covered. Emphasis will be placed on valve, seat, and guide service and injector tube replacement. The student will remove, clean, service, and reinstall a cylinder head. Prerequisites: DIEM 1301, 1405, and 2406.

## (DS-) Developmental Studies

The credit received from these courses cannot be applied towards degree completion nor will it result in transferable credit.

**DSCO 0300 Developmental Communication 1-2-3**  
A course offered in a laboratory setting to improve reading comprehension/rate and word recognition. Specific areas of study include syllabication, phonetic analysis, context clues, word elements, sequence, setting, main ideas, drawing conclusions, and making inferences.

**DSED 0100 College Orientation for International Students 1-0-1**  
This 16-hour course, designed primarily for students on F-1 visas, covers fundamentals of attending school in the United States and, specifically, at CTC. Getting a driver's license, obeying U.S. laws, safety, hazardous weather, taboo language, and immigration requirements are some of the topics covered. This course is mandatory for all first-semester international students.

**DSED 0300 College Study Skills 3-0-3**  
This course is designed to provide an opportunity for students to develop, select, and use strategies necessary in becoming prepared and successful in school and life. Emphases are placed on the transference of high-level study skills to practical classroom situations and include the areas of time management, effective listening and note taking, concentration, learning through media, reading, retention of information, taking examinations, creativity, and leadership.

**DSED 0302 College Study Skills for Foreign Students 3-0-3**  
This elective for DSI.A students at Levels 2-3 prepares students for the Test of English as a Foreign Language (TOEFL), the test required for entry into most college-level institutions. Advanced reading, listening, grammar, test-taking, and research techniques are taught.

**DSLA 0318, 0319 English for Foreign Students I and II (ESL) 3-2-3**  
(Previously numbered ENGL 0303 and 0304)  
These courses offer an integrated approach to speaking, listening, reading, and writing. Though primarily conversational in nature, grammatical concepts, reading, and writing are covered. These courses may be substituted for Listening I and Speaking I.

**DSLA 0310 Reading and Vocabulary I (ESL) 3-2-3**  
This course is designed for beginning non-native speakers who need to develop vocabulary and basic reading skills such as identifying the main idea, using context clues, and locating details.

**DSLA 0314 Writing I (ESL) 3-2-3**  
This course, designed for intermediate non-native speakers, is a continuation of Grammar I. It covers grammatical structures, beginning with clauses in complex sentences, and the simple process paragraph.

**DSLA 0315 Grammar I (ESL) 3-1-3**  
This course is for beginning-intermediate non-native speakers. It covers basic elements of English sentence structure and linguistic problem areas such as countable/uncountable nouns, articles, prepositions, verb phrases, and word order.

**DSLA 0316 Listening Comprehension I (ESL) 3-2-3**  
This course, for beginning non-native speakers, develops aural comprehension of simple conversations, short radio announcements, brief stories, and American language reductions such as "won't cha" and "would ja."

**DSLA 0317 Speaking I (ESL) 3-1-3**  
This course, for beginning non-native speakers, moves students from language recognition to oral production through the use of dictation and conversational dialogues.

**DSLA 0320 Reading and Vocabulary II (ESL) 3-2-3**  
This course, for intermediate non-native speakers, provides instruction in vocabulary, reading comprehension, structural analysis, and organizational patterns.

**DSLA 0321 Writing II (ESL) 3-2-3**  
This course is a continuation of Grammar I and Writing I. Students continue their study of grammar while learning to write narrative, comparison/contrast, and persuasive paragraphs.

**DSLA 0322 Academic Listening and Speaking II (ESL) 3-2-3**  
In this course, designed for intermediate non-native speakers, students develop beginning note-taking and speaking skills to prepare them for academic environments.

**DSLA 0330 Reading and Vocabulary III (ESL) 3-2-3**  
This course, a continuation of DSI.A 0320, provides further study in vocabulary, comprehension skills, and organizational patterns as they apply to reading and writing. Prerequisite: DSI.A 0320.

**DSLA 0332 Academic Listening and Speaking III (ESL) 3-2-3**  
In this course for advanced non-native speakers, students improve note taking, and oral reporting skills to prepare for college-level courses.

**DSMA 0101 Basic Developmental Mathematics 1-1.5-1**  
This course helps students prepare to pursue college-level academic work. It uses varied instructional techniques to identify deficiencies and provide a review of fundamental operations in mathematics.

**DSMA 0102 Developmental Mathematics Lab 0-3-1**  
This course provides a setting for students to develop and expand mathematical problem solving skills in a structured environment under the guidance of an instructor.

**DSMA 0300 Developmental Mathematics I 5-1-3**  
This developmental course includes adding, subtracting, multiplying, and dividing fractions, decimals, and integers; order of operations; percentages; line, bar, and pie graphs; pictographs; areas of plane figures; exponents; and an introduction to signed numbers and algebra. A laboratory is required.

**DSMA 0301 Developmental Mathematics II 5-1-3**  
Designed for students who need a review of fundamental algebraic operations. Topics include operations on real numbers, polynomials, linear equations, linear inequalities, factoring, graphing, and selected stated problems. A laboratory is required. (Previously numbered MATH 1300). Prerequisite: DSMA 0300 or appropriate test scores.

**DSMA 0302 Fundamentals of Mathematics I 3-0-3**  
This course includes operations with common fractions, decimals and positive integers; order of operations; prime factorization; greatest common factors; least common multiples; percentages; and basic equations. An introduction to consumer and business applications, statistical graphing, and basic geometry is also included.

**DSMA 0303 Developmental Mathematics IV 5-1-3**  
Topics include operations with rational expressions, linear equations, systems of linear equations, radical expressions, complex numbers, quadratics, and functions. A laboratory is required. Prerequisite: DSMA 0301 or appropriate test scores.

<b>DSMA 0304 Fundamentals of Mathematics II</b> 3-0-3 This course includes operations with real numbers, variable expressions, simple equations, polynomials, algebraic applications, factoring polynomials, and an introduction to graphs and linear equations. Prerequisite: DSMA 0302 or appropriate test scores.	<b>DSRE 0302 Fundamentals of Reading I</b> 3-0-3 Designed to aid students in acquiring basic skills needed for reading college-level materials. Emphasizes word attack skills, vocabulary development, comprehension, fluency, and study and test-taking skills. (Includes all of the objectives of DSRE 0300 without the additional laboratory reinforcement.)
<b>DSMA 0306 Intermediate Algebra I</b> 3-0-3 Topics include a review of factoring, rational and radical expressions, complex numbers, radical equations, quadratics and the study of the parabola. Prerequisite: DSMA 0304 or appropriate test scores.	<b>DSRE 0303 Fundamentals of Reading II</b> 3-0-3 Designed to aid students in developing and reinforcing the basic skills needed for reading college-level materials. Emphasis will be on vocabulary development, literal and critical comprehension skills, fluency, and study and test-taking skills. (Includes all of the objectives of DSRE 0301 without the additional laboratory reinforcement.)
<b>DSMA 0307 Intermediate Algebra II</b> 3-0-3 Topics include the straight line, systems of equations and inequalities, determinants, functions and relations, inverses and composite functions, and an introduction to exponential and logarithmic functions. Prerequisite: DSMA 0306.	<b>DSSP 0300 Developmental Speech</b> 1-2-3 An introductory course emphasizing the structure and different techniques of presentation as well as principles and methods of discussion. Designed to identify strengths/deficiencies and develop and improve interpersonal skills and the student's ability to communicate through effective speech.
<b>DSMA 0308 Pre-College Math</b> 3-0-3 This developmental course includes arithmetic operations, basic algebraic concepts and notations, geometry, and real and complex number systems. The course also covers relations and functions; inequalities; factoring; polynomials; rational expressions; and quadratics. It also provides an introduction to complex numbers; exponential and logarithmic function; determinants, matrices, sequences, and series.	<b>DSWR 0100 Developmental Writing Laboratory</b> 0-1-1 This course helps prepare for college-level academic work using varied instructional techniques to help students improve their proficiency in basic composition skills such as idea generation, organization, style, use of standard English, and revision.
<b>DSMA 0312 Fundamentals of Mathematics I</b> 3-1-3 This course includes operations with common fractions, decimals and positive integers; order of operations; prime factorization; greatest common factors; least common multiples; percentages; and basic equations. An introduction to consumer and business applications, statistical graphing, and basic geometry is also included. A laboratory is required.	<b>DSWR 0111 Basic Writing I</b> 1-0-1 This course covers basic composition skills such as idea generation, organization, style, use of standard English, and revision.
<b>DSMA 0314 Fundamentals of Mathematics II</b> 3-1-3 This course includes operations with real numbers, variable expressions, simple equations, polynomials, algebraic applications, factoring polynomials, and an introduction to graphs and linear equations. A laboratory is required. Prerequisite: DSMA 0312 or appropriate test scores.	<b>DSWR 0112 Basic Writing II</b> 1-0-1 This course is a continuation of DSWR 0111 and emphasizes the correct use of grammar, organization, and style.
<b>DSMA 0316 Intermediate Algebra I</b> 3-1-3 Topics include a review of factoring, rational expression, radical expressions, complex numbers, radical equations, quadratics and the study of the parabola. A laboratory is required. Prerequisite: DSMA 0314 or appropriate test scores.	<b>DSWR 0301 Developmental Writing I</b> 3-1-3 A study of basic composition designed to aid the student in acquiring the writing skills needed for college-level writing. Includes an intensive study of basic composition skills. Designed for students who scored below 50% on the Pre-TASP writing section. Emphasizes paragraph writing, with attention given to grammar problems as they occur in the context of the paragraph. Intended for native English speakers or for those students who have scored 550 or above on the Test of English as a Foreign Language (TOEFL).
<b>DSMA 0317 Intermediate Algebra II</b> 3-1-3 Topics include the straight line, systems of equations and inequalities, determinants, functions and relations, inverses and composite functions, and an introduction to exponential and logarithmic functions. A laboratory is required. Prerequisite: DSMA 0316.	<b>DSWR 0302 Developmental Writing II</b> 3-1-3 A study of basic composition designed to aid the student in acquiring the writing skills needed for college-level writing. Designed for students who scored between 50-69% on the Pre-TASP writing section or passed DSWR 0301. Emphasizes essay writing, with attention given to grammar problems as they occur in the context of the essay. Intended for native English speakers or for those students who scored 550 or above on the Test of English as a Foreign Language (TOEFL).
<b>DSRE 0101 Developmental Reading Laboratory</b> 0-1-1 This course helps prepare for college-level academic work using varied instructional techniques to help students improve their proficiency in reading comprehension/rate, word recognition, and vocabulary development.	<b>DSWR 0303 Fundamentals of Writing I</b> 3-0-3 Fundamentals of Writing I is a course in basic writing skills at the sentence and paragraph levels. The course includes instruction in basic grammar, sentence structure, punctuation, and other necessary skills leading to the proper construction of a paragraph.
<b>DSRE 0111 Basic Reading I</b> 1-0-1 This course improves reading skills, vocabulary, and reading comprehension/rate.	<b>DSWR 0304 Fundamentals of Writing II</b> 3-0-3 This course is a continuation of DSWR 0303 and emphasizes composition skills at the paragraph and essay levels. The course includes a study of sentence-level grammar and punctuation and presents the organizational skills needed to write a basic essay.
<b>DSRE 0300 Developmental Reading I</b> 2-2-3 Designed for students who have difficulty reading college texts; specifically those who scored below 50% on the Pre-TASP reading section. Emphasizes word attack skills, vocabulary development, comprehension, fluency, and study and test-taking skills.	
<b>DSRE 0301 Developmental Reading II</b> 2-2-3 Designed for students who have difficulty reading college texts; specifically those who scored between 50-69% on the Pre-TASP reading section or pass DSRE 0300. Emphasizes vocabulary development, comprehension, fluency, and study and test-taking skills.	

## (ECON) Economics

### **ECON 1303 Consumer Economics** 3-0-3

A study of consumer goods and services as related to the home/family and the problems and pitfalls associated therewith. This includes a study of family purchasing, advertising, commodity information, sales approaches from a consumer viewpoint, and sources of advice and counseling. This course allows the supervisor to better advise subordinates on economic problems.

### **ECON 2301 Macroeconomics** 3-0-3

Introduction to economic analysis, price-level changes, the creation of money, the Federal Reserve System and monetary policy, the national accounts, the consumption function, taxation, fiscal policy, public debts, the theory of economic growth and population problems, and foreign economic policy.

### **ECON 2302 Microeconomics** 3-0-3

Determination of relative prices, consumer demand analysis, the competitive firm; agricultural policy, the monopolistic firm, imperfect competition, business organization and government regulation, determinants of demand, the economic view of taxation and public expenditure, regional economics, international trade and finance.

## (ELTE) Communications Electronics Technology

### **ELTE 1303 Assembly Methods** 1-5-3

A study of modern assembly methods and practices used in industry including the design, layout, and construction of electronic apparatus.

### **ELTE 1401 Electrical Circuits I** 3-3-4

The first of a two-course study of electrical circuitry. This course includes a study of the elementary principles of electricity. It covers DC topics such as elementary physics, Ohm's Law, series and parallel resistive networks, and power. It also includes the study and use of analog and digital multimeters.

### **ELTE 1402 Electrical Circuits II** 3-3-4

This is the second course in the study of electrical circuitry, and includes inductive and capacitive, reactance, waveform types and voltage measurements. This course includes AC circuit topics such as impedance calculation, resonant circuits, transformers, and an in-depth study of the use of the triggered-sweep oscilloscope. Prerequisite: ELTE 1401.

### **ELTE 1403 Solid-State Electronics** 3-3-4

A study of the active electronic devices (i.e., diodes, transistors, etc.) and their more common circuit applications. This course covers circuit design methods of simple power supplies, amplifiers, and switching circuits. This is a technical course requiring a working knowledge of simple algebra. Prerequisite or Corequisite: ELTE 1402.

### **ELTE 1404 Communications Circuits I** 3-3-4

A study of basic circuits used throughout industry today. Prerequisite or Corequisite: ELTE 1403.

### **ELTE 1406 Mobile Security Systems** 3-3-4

A study of various types of electronic security systems, related sensors, and control devices used in 12V systems. Emphasis will be placed on installation, testing, and final performance evaluation.

### **ELTE 1407 Home Entertainment Systems** 3-3-4

A study of the basic operating principles, installation techniques, and preventative maintenance of stereo systems, CD players, video cassette recorders, audio cassette decks, and equalizers.

### **ELTE 2103 Individualized Research** 1-0-1

This course allows the student to prepare the backup and research that is necessary in order for the student to complete ELTE 2303. Prerequisites: A third-semester student and consent of the Department Chair.

### **ELTE 2301 Broadcast Equipment Maintenance** 1-6-3

The operation, preventive maintenance procedures, and troubleshooting of modern-day radio and television broadcast equipment. The course gives the student much needed practical experience that can only be gained in a live-station atmosphere. Prerequisites: ELTE 1404, 2407, and consent of the Department Chair.

### **ELTE 2303 Special Intensive Study** 0-9-3

An intensive study in the design, theory of operation, and construction techniques used in a project which holds special interest to the student and is in the field of his/her major. A student obtaining a second or third degree, must repeat the course with emphasis and project related to the discipline in which the degree is to be awarded. The student must be eligible for graduation at the end of the semester in which this course is taken. Prerequisites: ELTE 2103, a fourth-semester student, and consent of the Department Chair.

### **ELTE 2401 Personal Mobile Communications Systems** 3-3-4

This course covers the installation, operation, and final performance testing of cellular telephones, mobile telephones, and CB/marine radios.

### **ELTE 2402 Advanced Test Equipment** 3-3-4

Includes the use and normal user calibration techniques for all phases of electronic test equipment from the most simplest to the most advanced. Prerequisite: ELTE 1403.

### **ELTE 2403 Home Security Systems** 3-3-4

A study of various types of electronic security systems, related sensors, and control devices used in modern homes, duplexes, and complex-style apartments.

### **ELTE 2404 CATV, MATV and CCTV Systems** 3-3-4

A study of large-scale TV cable systems, small-scale master antenna systems, and closed-circuit surveillance systems. It includes the design, selection, configuration, installation, and troubleshooting.

### **ELTE 2405 Satellite Systems** 3-3-4

This course provides the student with the knowledge of operation and theory of satellite receiving systems. The detailed theory covers such areas as transmission uplinking, downlinking, overall systems block diagram antennas and motor controllers, single- and double-conversion systems, receiver theory; operation of general troubleshooting procedures, L.N.A. and down converters. Emphasis is also placed on antenna installation and alignment procedures. The student will be responsible for setting up a complete system from antenna alignment to receiver hookup to a television set. Prerequisites: ELTE 1403 and 1404.

### **ELTE 2406 Integrated Devices** 3-3-4

An advanced study of the many types of integrated circuits (ICs) in use today. The course will include digital, linear, and LED-type devices. Course will also include application and application design. Prerequisites: ELTE 1403 and CMET 1401.

### **ELTE 2407 Communications Circuits II** 3-3-4

A study of communications circuits necessary for the successful acquisition of the FCC First Class license. Prerequisites: ELTE 1403 and 1404.

### **ELTE 2408 Industrial Electronic Control Circuits** 3-3-4

A study of special-purpose electronic control circuits and systems as applied by industry today. This course will include theory and operation, maintenance, diagnostic troubleshooting, and repair of these special-purpose circuits. Prerequisite: ELTE 1403.

### **ELTE 2409 Electronic Systems Troubleshooting** 3-3-4

This course includes theoretical and practical laboratory assignments in the study of techniques used in signal tracing and logical circuit diagnosis of different types of analog electronic systems. Prerequisite: CMET 1409.

**ELTE 2410 Radio Systems 3-3-4**

An in-depth study of the circuitry, both discrete and integrated, used in today's AM and FM tuner amps, including both two- and four-channel multiplexing. Prerequisite: ELTE 1403.

**ELTE 2412 Circuits and Systems--Troubleshooting and Repair 3-3-4**

This course is an in-depth study of current troubleshooting and maintenance techniques for linear (analog) and digital electronics equipment including transducers, switching components, motors and generators (servo systems), control circuits, and special power supplies. Prerequisites: CME1 1409 and consent of the Department Chair.

**(EMET) Emergency Medical Technician****EMET 1101 Basic Life Support and Emergency Care 1.5-0-1**

Basic instruction in emergency first aid, including CPR training. Students successfully completing the course receive CPR/BLS certification.

**EMET 1102 Cardiopulmonary Resuscitation 1-0-1**

Recognition and management of acute cardiorespiratory emergencies and upper airway obstructions using basic life support techniques from either the American Heart Association or the American Red Cross.

**EMET 1103 EMT Cardiac Pathophysiology and ECG Interpretation 1-0-1**

The anatomy and physiology of the cardiovascular and respiratory systems. Includes pathophysiology of heart disease, ECG theory, and interpretation of dysrhythmias. § Prerequisite: EMET 1402 or other medical training.

**EMET 1104 Introduction to Basic Science for the Paramedic 1-0-1**

Prepares the student to take the basic science portion of EMET 2304. Reviews human gross anatomy and physiology of various human systems; human cellular anatomy and function; human homeostasis; physiology of the heart, lungs, and blood vessels; acid-base balance; and blood as a tissue.

**EMET 1105 EMT Pre-hospital Care of Poisoning 1-0-1**

Pre-hospital treatment for victims of alcohol and drug overdose, poisonous bites of reptiles, spiders, and bees. Antidotes, adsorbents, anaphylactic shock, tissue response, epidemiology, indications and contraindications for emetics.

**EMET 1106 EMT Pre-hospital Care of Trauma 1-0-1**

Pre-hospital assessment and management of trauma. Includes pathophysiology of soft tissue injuries; fractures; intrathoracic, abdominal, and head injuries; and the healing mechanisms of tissue systems. § Prerequisite: EMET 1402 or other medical training.

**EMET 1107 Shock: Concepts and Treatment (MAST and IV Infusion) 1-0-1**

Pathologic and clinical levels of the shock syndrome. Theory and applications of shock management, intravenous transfusions and infusions and Military Anti-Shock Trousers (MAST). Includes indications and contraindications. § Prerequisite: EMET 1402 or other medical training.

**EMET 1108 Laboratory Techniques and IV Therapy 1-0-1**

Uses of and indications for IV therapy. Types of solution and equipment needed; techniques for starting IVs and for venipuncture. § Prerequisite: EMET 1402 or other medical training.

**EMET 1109 Basic Auto Extrication 1-0-1**

Emphasizes spinal immobilization, lifting, and moving techniques of the motor vehicle accident patient. Discusses the pathophysiology of spinal and head injuries, facial trauma, and airway management. § Prerequisite: EMET 1402 or other medical training.

**EMET 1110 Emergency Airway Management 1-0-1**

Anatomy of upper and lower respiratory airways, cervical spine and spinal cord control. Indications and use of adjunct airways, esophageal obturator airway, esophageal gastric-tube airway, endotracheal intubation techniques, and oxygen delivery devices. § Prerequisite: EMET 1402 or other medical training.

**EMET 1111 EMT Medical and Environmental Emergencies 1-0-1**

The pathophysiology, diagnosis, and pre-hospital management of common environmental and medical emergencies including burn, diabetic, cerebrovascular accidents, drowning, heart attack, hypothermia, heat stroke, smoke inhalation, abdominal, and thoracic emergencies. § Prerequisite: EMET 1402 or other medical training.

**EMET 1112 EMT Obstetrical and Pediatric Emergencies 1-0-1**

Stages of fetal development, labor, and delivery for normal and abnormal pregnancies. Management of emergency delivery and postpartum stages. Basic life support techniques for the pediatric patient including other medical emergencies.

**EMET 1113 EMT Patient Psychology 1-0-1**

Prepares prospective EMT personnel to deal with patients' emotions as they affect the EMT's ability to treat physical injuries.

**EMET 1114 EMT Triage 1-0-1**

Methods of prioritizing and handling multiple-trauma victims. Emphasis on proper primary and secondary patient surveys, civilian and military emergency medical triage, CPR, shock management, hemorrhage control and use of life support equipment. § Prerequisite: EMET 1402 or other medical training.

**EMET 1115 AIDS and Infectious Diseases for Emergency Responder 1-0-1**

The study of infectious diseases with emphasis on pathophysiology, transmission modes (routes) and preventive measures used in the control of those diseases most likely to be encountered by and which represent a serious health threat to EMS personnel, namely: Infectious Hepatitis, Acquired Immune Deficiency Syndrome (AIDS), Meningitis, Tuberculosis, and Herpetetic Whitlow. § Prerequisite: EMET 1402 or other rescue training.

**EMET 1116 Crisis Intervention & Management 1.5-0-1**

Focus on general techniques for management of individuals in crisis including intervention models, general intervention techniques, and interventions for selected specific responses.

**EMET 1117 Crisis Intervention: Drug/Alcohol Overdoses 1-0-1**

Management techniques and emergency treatment of individuals who have overdosed on drugs or alcohol.

**EMET 1118 Crisis Intervention: Victims of Violence 1-0-1**

Management techniques and emergency treatment of victims of violence.

**EMET 1119 Crisis Intervention: Rape 1-0-1**

Management techniques and emergency treatment of rape victims.

**EMET 1120 Crisis Intervention: Spouse Abuse 1-0-1**

Management techniques and emergency treatment of victims of spouse abuse.

**EMET 1121 Crisis Intervention: Child Abuse** 1-0-1  
Management techniques and emergency treatment of victims of child abuse.

**EMET 1122 Crisis Intervention: Eating and Food-Related Emergencies** 1-0-1  
Management techniques and emergency treatment of individuals requiring assistance related to eating and/or food.

**EMET 1123 Crisis Intervention: Military Field Training Injuries/Disorders** 1-0-1  
A military-specific course covering management techniques and emergency treatment of common injuries/disorders occurring during military field training exercises.

**EMET 1124 Sports Injuries** 1.5-0-1  
Consideration of acute injury and illness caused by recreational physical exercise.

**EMET 1125 EMT Crisis Intervention: Abuse, Rape and Suicide** 1-0-1  
The psychological aspects of child and spouse abuse, rape and suicide. Includes epidemiology, pre-hospital care, and crisis intervention techniques.

**EMET 1200 Emergency Medical Technician-Basic Refresher Course** 2-1-2  
Reviews the knowledge and skills necessary for recognition and proper treatment of patients requiring emergency care. This course conforms to the Department of Transportation guidelines for EMT Refresher training. This course is required by the National Registry every two years to maintain certification at the EMT-Basic level. Prerequisite: Current or recently lapsed (less than 2 years) National Registry EMT-Basic Certification.

**EMET 1202 Combat Lifesaver Course** 2-1-2  
Trains combat soldiers to supplement military medics in a variety of lifesaving tasks and related medical care.

**EMET 1303 First Responder** 2-2-3  
This course prepares the first responder, or medically untrained, to be proficient in not only providing basic life support to victims of emergencies, but also in taking any actions necessary to minimize the patient's discomfort and prevent further injury. This course has been designed to meet the specifications of the Department of Transportation's First Responder Training Course.

**EMET 1304 Drug and Alcohol Abuse** 3-0-3  
This course discusses the physiological and psychological effects of drug and alcohol abuse on the individual, the family, and on society. Students learn the symptoms of drug and alcohol abuse and how to recognize them in individuals. The course discusses the problems causing abuse and how to understand and help the user. The course also includes discussion of the organizations available for treatment of the user, their effectiveness, and an evaluation of alternate treatment programs.

**EMET 1305 Emergency Medical Seminar** 3-0-3  
This course is designed to keep the Emergency Medical Technician abreast of new developments, trends, current major issues, legal professional concerns, and other important factors that have an impact upon the emergency medical field. This course may be repeated for credit.

**EMET 1402 Emergency Medical Technician-Ambulance** 3-4-4  
This course exposes the student to the didactic and practical experiences outlined in the 1994 Department of Transportation's NHTSA curriculum. All of the skills and knowledge elements necessary to deal with the broad spectrum of illness or injury in the pre-hospital phase of care are included. Upon successful completion of the program, students are eligible to take the exam to be certified as an EMT by the National Registry of EMT's.

**EMET 2101 Introduction to Paramedic** 1-0-1  
This course provides an overview of the paramedic's role in both civilian and military environments, the paramedic's function, legal responsibilities, and career opportunities. Prerequisite: EMET 1402.

**EMET 2301 Disaster Planning** 3-0-3  
This course is designed to help administrators prepare emergency operation plans and train existing personnel to cope with a disaster if it should strike. The course provides valuable information on how to plan and prepare efficient responses to earthquakes, floods, fires, nuclear attacks, and other emergency situations. It includes elements of disaster preparation, organization of emergency operations plans, training of personnel, the emergency operations center, and coordination with other organizations.

**EMET 2302 Emergency Medical Center Management** 3-0-3  
This course provides the student with an understanding of management theories and functions as they relate to the operations of an emergency medical center. Prerequisite: MGMT 1305.

**EMET 2303 Psychology of Emergencies** 3-0-3  
This course covers communicating with families involved in emergencies and the EMT's role in counseling. It also considers personality structures, defense mechanisms, and the developmental stages of man.

**EMET 2304 Introduction to Paramedic Medicine** 3-0-3  
Emphasizes the role of the paramedic: pharmacology and fluid/electrolyte balance; in-depth coverage of anatomy and physiology, respiratory and cardiovascular systems, and recognition and treatment of respiratory and cardiac problems including dysrhythmia. Lecture and demonstration. Prerequisite: EMET 1402.

§ Other acceptable medical training is that which is received through military medical basic training programs or civilian medical programs which goes beyond first aid.

## (ENGL) English

**ENGL 1301 Composition and Rhetoric I** 3-0-3  
A study of the principles and techniques of written compositions including sentence structure, paragraph development, and paper organization. Also stresses the development of critical thinking as it applies to the textual analysis of expository prose.

**ENGL 1302 Composition and Rhetoric II** 3-0-3  
A continuation of ENGL 1301, emphasizing in more depth the principles and techniques of written compositions. Focus of compositions is on the development of critical thinking as it relates to the textual analysis of literary genres: the short story, poetry, drama, and the novel. Formal research paper is required. Prerequisite: Completion of ENGL 1301 with a grade of "C" or above, or equivalent.

**ENGL 1312 Communications Skills** 3-0-3  
Instruction in grammar and diction, writing expository papers, writing effective business correspondence and reports, and oral presentations.

**ENGL 1313 College Reading** 2-1-3  
Designed for students wishing to improve their analytical reading and critical thinking abilities. Development of inferential and interpretive comprehension skills as well as higher-level skills in analysis, synthesis, and evaluation are stressed. Prerequisite: College-level reading skills.

**ENGL 2311 Technical Writing** 3-0-3  
Study of technical, scientific, and business writing including reports, proposals, and other papers. The course also includes presentation of oral reports. Prerequisite: ENGL 1301 or ENGL 1312.

**ENGL 2322 English Literature I 3-0-3**

A survey of English literature from Beowulf through the 18th century. Prerequisites: ENGL 1301 and 1302, or equivalent.

**ENGL 2323 English Literature II 3-0-3**

A survey of English literature beginning with the pre-Romantic periods through the early 20th century. Prerequisites: ENGL 1301 and 1302, or equivalent.

**ENGL 2327 American Literature I 3-0-3**

A survey of the major American writers from the Colonial period to Whitman. Prerequisites: ENGL 1301 and 1302, or equivalent.

**ENGL 2328 American Literature II 3-0-3**

Survey of major American writers from Whitman to the present. Prerequisites: ENGL 1301 and 1302, or equivalent.

**ENGL 2332 World Literature I 3-0-3**

A survey of masterpieces of western world literature from Homer through the Renaissance. Prerequisites: ENGL 1301 and 1302, or equivalent.

**ENGL 2333 World Literature II 3-0-3**

A survey of masterpieces of western world literature from the Renaissance to the twentieth century. Prerequisites: ENGL 1301 and 1302, or equivalent.

**(ENGR) Engineering (Civil and General)****ENGR 1101 Introduction to Engineering 1-0-1**

Introduction to all engineering fields and the opportunities within the scope of professional work.

**ENGR 1304 Engineering Graphics 2-4-3**

Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projections drawing, geometry of graphical construction. Required for beginning engineering students.

**ENGR 1305 Descriptive Geometry 2-4-3**

Involves point, line, and plane relationships; auxiliary views; intersections; and flat-pattern development. Emphasis is placed on practical solutions to realistic engineering problems relating to aerospace, mining, and geology. Prerequisite: ENGR 1304.

**(FPRT) Fire Protection Technology****FPRT 1301 Fundamentals of Fire Protection 3-0-3**

History and philosophy of fire protection; review of statistics of loss of life and property by fire; introduction to agencies involved in fire protection; current legislative developments and career orientation; recruitment and training for fire departments; position classification and pay plans; employee organizations; a discussion of current related problems and review of expanding future fire protection problems.

**FPRT 1302 Fire Prevention 3-0-3**

The objectives and views of inspection, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire prevention organization, public cooperation and image, recognition of fire hazards, insurance problems and legal aspects, development and implementation of systematic and deliberate inspection program. Survey of local, state, and national codes pertaining to fire prevention and related technology, relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards

**FPRT 1303 Fire Protection Systems 3-0-3**

Study of the required standards for water supply, special hazards protection systems, automatic sprinklers and special extinguishing systems, automatic signaling and detection systems, rating organizations and underwriting agencies.

**FPRT 1304 Fire Administration I 3-0-3**

An in-depth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relationship of various government agencies to fire protection areas. Fire service leadership as viewed from the Company Officer's position.

**FPRT 1305 Fire Administration II 3-0-3**

Study to include insurance rates and rating, preparation of budgets, administration and organization of training in the fire department; city water requirements, fire alarm and communication systems; importance of public relations, report writing and record keeping; measurement of results, use of records to improve procedures, and other related topics; legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings.

**FPRT 1307 Fire Service Chemistry I 3-0-3**

An introductory study to inorganic and organic chemistry, with emphasis on the metric system, the periodic chart, water, oxygen, hydrogen, carbon, hydrocarbons, carbohydrates, and polymers.

**FPRT 1308 Fire Service Chemistry II 3-0-3**

A continuation of FPRT 1307. Prerequisite: FPRT 1307.

**FPRT 2301 Industrial Fire Protection I 3-0-3**

Specific concerns and safeguards related to business and industrial organization. A study of Industrial Fire Brigade organization and development, plant layout, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organizations. Study of elementary industrial fire hazards in manufacturing plants. Prerequisite: FPRT 1301.

**FPRT 2302 Industrial Fire Protection II 3-0-3**

Development of fire and safety organizations in industry; relationship between private and public fire protection organizations; current trends; deficiencies and possible solutions for industrial fire problems, role of insurance and other special organizations, an in-depth study of specific industrial processes, equipment, facilities and work practices to understand the potential hazards and techniques used to detect and control such hazards. Field trips to selected plants and demonstrations of new techniques, equipment and innovations. Prerequisite: FPRT 2301.

**FPRT 2303 Hazardous Materials I 3-0-3**

Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, and handling of hazardous materials (i.e., flammable liquids, combustible solids, and gases). Emphasis on emergency situations and most favorable methods of handling fire lighting and control. Prerequisite: FPRT 2301.

**FPRT 2304 Legal Aspects of Fire Protection 3-0-3**

A study of legal rights and duties, liability concerns and responsibilities of the fire department while carrying out its duties. Introduction and basic concepts of civil and criminal law, the Texas and Federal judicial structure, and city's liability for acts of the fire department and fire prevention bureaus. An in-depth study of various cases concerning firefighters, fire departments and municipalities.

**FPRT 2305 Building Codes and Construction 3-0-3**

Fundamental consideration and exploration of building construction and design with emphasis on fire resistance of building materials and assemblies, exposures, and related data focused on fire protection concerns; reviews of related statutory and suggested guidelines, both local and national in scope. Review of Model Building Codes and Life Safety Codes.

**FPRT 2306 Fire and Arson Investigation 3-0-3**

A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussions of law, decisions and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between firefighters and arson investigators and other related topics. Prerequisite: FPRT 2305.

**FPRT 2308 Hazardous Materials II 3-0-3**

Hazardous materials covering storage, handling laws, standards, and firefighting techniques associated with chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuel, and radioactive materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radioactive materials and operational procedures. Prerequisite: FPRT 2303.

**FPRT 2309 Fire Safety Education 3-0-3**

A survey of physical, chemical, and electrical hazards and their relationship to loss of property and/or life. Study of codes, laws, problems, and cases. Detailed examinations and study of the physical and psychological variables related to the occurrence of casualties. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks.

**FPRT 2310 Marine Fire Protection 3-0-3**

This course covers the specific fire protection concerns of the maritime industry. It provides an in-depth study of the causes of fires, fire prevention, special firefighting techniques, special equipment and fire safety as they relate to watercraft.

**FPRT 2314 Fire Service Hydraulics 3-0-3**

This course covers the fundamental concepts needed to solve a broad range of fire protection hydraulic problems. It includes the measurements of water from flowing orifices; the characteristics of water flow through conduits; the pressure, volume and frictional characteristics of mobile and stationary fire pumps; the trajectory and patterns of fire streams; and the relationship between fixed and mobile fire suppression equipment.

**FPRT 2404 Firefighting Tactics and Strategy 4-0-4**

Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment, and apparatus. Emphasis to be placed on pre-planning, study of conflagration problems, fire ground organization, problem solving related to fire ground decision making and attack tactics and strategy. Use of manual aid and large-scale command problems. Prerequisite: Completion, or registration therein, of all other required FPRT courses.

**(FREN) French****FREN 1411 Beginning French I 4-2-4**

This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

**FREN 1412 Beginning French II 4-2-4**

Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: FREN 1411.

**FREN 2311 Intermediate French I 3-0-3**

This course includes grammar review, composition, and reading of French masterpieces, with conversation based on material read. Prerequisite: FREN 1411 and 1412 or two years of French in an accredited high school.

**FREN 2312 Intermediate French II 3-0-3**

This course continues reading of French masterpieces; drill on syntax as needed for reading, composition, and conversation. Prerequisite: FREN 2311.

**(GEOG) Geography****GEOG 1300 Introduction to Geography 3-0-3**

This is an introductory-level course that combines physical and cultural geography using a regional approach. The course examines the physical environment of the earth and explains maps, covers man's adaptation to environmental extremes, and explores man's use of his environment ranging from adaptation within a tribal culture to the highly modernized urban world.

**GEOG 1301 Elements of Physical Geography 3-0-3**

A course which examines the physical characteristics of the Earth's environment using maps as a tool for expressing location and interrelationships. Principle discussion topics are the atmosphere and oceans, weather, climate, environments of earth materials and vegetation, land forms and their development.

**GEOG 1302 Cultural Geography 3-0-3**

A survey of human geography and the ways mankind adapts and reacts to his environment. Culture is defined and its various aspects are described and compared. Important topics to be discussed are population, health, livelihoods, communities, urbanization, organizational interaction (including economics and politics), present and future global problems.

**GEOG 1303 World Regional Geography 3-0-3**

The study of major developing and developed regions of the world stressing their similarities and differences and their physical and cultural interrelationships. An additional emphasis is the diversity of ideas and practices to be found in those regions.

**(GEOL) Geology****GEOL 1301 Earth Science 3-0-3**

A course designed for Education majors. This course covers the nature of the Earth as revealed by geology, astronomy, meteorology, and other related physical sciences.

**GEOL 1305 Environmental Geology 3-0-3**

An interdisciplinary course which includes an overview of Earth materials and processes, which then goes on to focus upon specific geologic problems and possible solutions. A major emphasis of this course is that of the relationship of geology with other academic and practical matters and studies.

**GEOL 1403 Physical Geology 3-3-4**

An introductory course about the materials and processes of the Earth. Topics included are: minerals, rocks, plate tectonics, weathering, running water, ground water, glaciers, deserts, and others. The study of local rocks and minerals and the opportunity for field observation and collection are provided.

**GEOL 1404 Historical Geology 3-3-4**

The course involves a study of the record of life forms that have developed throughout geological time. It also covers the development of the Earth from its cosmic beginning to current land forms. Principles of stratigraphy, paleontology, geologic time, plate tectonics, and hypotheses of the Earth's origin are studied in the course. Field work, including the study of local fossil fauna, is an integral part of the course.

## **(GERM) German**

### **GERM 1411 Beginning German I 4-2-4**

This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

### **GERM 1412 Beginning German II 4-2-4**

Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: GERM 1411.

### **GERM 2311 Intermediate German I 3-0-3**

This course includes grammar review, composition and practice in conversation, with readings in contemporary German writings. Includes short stories and some longer works, providing a conversational basis. Prerequisite: GERM 1411 and 1412, or two years of German in an accredited high school.

### **GERM 2312 Intermediate German II 3-0-3**

This course continues reading in contemporary German writings; drill on syntax as needed for reading, composition, and conversation. Prerequisite: GERM 2311.

## **(GOVT) Government**

### **GOVT 2301 State and Federal Government I 3-0-3**

An introductory, survey course on various United States, Texas, and local government topics. This course includes study of the U.S. and Texas constitutions, federalism, local governments, national elections (state and local), civil liberties, and interest groups.

### **GOVT 2302 State and Federal Government II 3-0-3**

An introductory, survey course on various United States, Texas, and local government topics. This course includes studying institutions of national and Texas governments including the executive, legislative, and judicial branches; the bureaucracy; and the public policy including defense and foreign relations as examples.

### **GOVT 2304 Introduction to Political Science 3-0-3**

This course is designed to introduce the student to the general area of political science and to provide knowledge and understanding of political fundamentals, public law, political dynamics, public policy, theory and organization of the modern state, and international relations.

## **(GRPH) Graphics and Printing**

### **GRPH 1405 Introduction to Graphic Arts and Printing (OPRT 1401) 3-3-4**

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.

### **GRPH 1409 Press Operations (OPRT 1403) 3-3-4**

Basic theory and techniques in the operation of the small (duplicator) offset press, including the "offset principle," feeding all types of stock, image position, sheet delivery, and the maintaining of correct image density. Prerequisite or Corequisite: GRPH 1405 or consent of the Department Chair.

### **GRPH 1419 Binding and Finishing Operations (OPRT 1404) 3-3-4**

An overview of bindery and finishing equipment and techniques. Emphasis on parts and operation. Demonstration of sorting, folding, cutting, labeling, wrapping, packaging, and binding methods. Prerequisite or Corequisite: GRPH 1405 or consent of the Department Chair.

### **GRPH 1422 Electronic Publishing I (OPRT 1405) 3-3-4**

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. Prerequisite: GRPH 1405 and 1491 or consent of the Department Chair.

### **GRPH 1471 Basic Camera (OPRT 1402) 3-3-4**

Basic camera operations and darkroom procedures including percentage size calculations, simple line shots, and film processing by the tray method. Basic techniques in the precise layout of simple line negative, halftones, and combinations. Selection of proper plates for specific jobs and the exposing and developing of plates. Prerequisite or Corequisite: GRPH 1405 or consent of the Department Chair.

### **GRPH 1474 Preventive Maintenance (OPRT 1408) 3-3-4**

This course covers preventive maintenance of the offset printing press. It also includes bindery operations such as paper characteristics and identification proper paper jogging and padding procedures, figuring paper cuts, and paper cutter operations. A thorough study of the adjustments, preventive maintenance and simple repair on darkroom, composing room, press room, and bindery equipment. Prerequisite: GRPH 1405 or GRPH 1409 or consent of the Department Chair.

### **GRPH 2436 Prepress Techniques (OPRT 2401) 3-3-4**

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. Prerequisite: GRPH 1491 or consent of the Department Chair.

### **GRPH 2438 Press Operation II (OPRT 2402) 3-3-4**

Maintenance and operation of 22-inch or larger offset presses, and production of process-color-jobs with hairline registration. Focus on interpretation of color bars for the printing process. Prerequisite: GRPH 1409 or consent of the Department Chair.

### **GRPH 2486 Internship-Graphics and Printing Equipment Operator (OPRT 2409) 1-18-4**

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 achieve 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. Prerequisite: Consent of the Department Chair.

## **(HIST) History**

### **HIST 1301 History of the United States to 1877 3-0-3**

English colonization, the Revolution, adoption of the Constitution, growth of nationalism, cotton and the slavery problem, civil war, and reconstruction.

### **HIST 1302 History of the United States from 1877 3-0-3**

New social and industrial problems, rise of the progressive movement, United States' emergence as a world power, World War I, reaction and the New Deal, World War II, and contemporary America.

### **HIST 2301 Texas History 3-0-3**

A survey of Texas from the Spanish exploration to the present.

**HIST 2311 Survey of Western Civilization I 3-0-3**  
An introductory survey course from the rise of Near Eastern civilization to the conclusion of the French Revolution. Special emphasis is placed on the period 1500-1815. Topics covered include Ancient Times, the Middle Ages, the Renaissance, Reformation, establishment of West-European leadership, Transformation of Eastern Europe, the Enlightenment, Scientific Revolution, and the French Revolution.

**HIST 2312 Survey of Western Civilization II 3-0-3**  
An introductory survey course from 1815 to the present with particular emphasis upon the 20th century. Topics covered include the international impact of the French Revolution, Reaction vs. Progress, the Industrial Revolution, the Revolutions of 1848, the Rise of Large Nation-States, European Imperialism, European Civilization 1870-1914, World War I and the Russian Revolution, Totalitarianism and World War II, and the Contemporary World.

**HIST 2381 African-American History 3-0-3**  
The purpose of this course is to familiarize students with the general study of African-American history from the early days of West Africa to American slavery and freedom and ending with the modern civil-rights movement of the 1950s and 1960s.

## (HMCA) Hospitality Management

**HMCA 1202 Sanitation and Safety 2-0-2**  
This course includes a study of personal cleanliness; sanitary practices in food preparation; cause, investigation, and control of illness caused by food contamination; food storage and refrigeration; sanitation of dishes, equipment, and kitchens; cleansing materials, garbage and refuse disposal; safety precautions and accident prevention. Upon completion of this course, the student will have sufficient knowledge to pass the Educational Institute of National Restaurant Association (NRA) certification examination. Student must pass certification exam to receive a passing grade.

**HMCA 1207 Menu Planning 2-0-2**  
Basic factors of planning menus including variety and nutrition, techniques of preparing attractive menus while maintaining budgetary control, and types of menus for various public and private institutions.

**HMCA 1303 Food Purchasing 3-0-3**  
Applied theory of food and beverage purchasing; factors affecting selections, standards, quality, and prices; techniques of receiving, storing, and issuing supplies, foods, and materials; applied theory of cost control, pricing and portions. An optional NRA certification exam is offered.

**HMCA 1304 Hospitality Industry Law 3-0-3**  
A study of the nature and scope of business law with emphasis on the hospitality industry. Licensing, civil rights, owner responsibility for safety and property loss of guests, rights of the owner, and history of contemporary hospitality law will be discussed.

**HMCA 1305 Convention and Groups 3-0-3**  
Organization and planning for meetings and conventions including budget, and site selection, menu and program planning and marketing the event.

**HMCA 1308 Front Office Procedures 3-0-3**  
This course includes lodging organization and services, front office salesmanship, cashing, night auditing, accounting for guest charges, procedures and forms for accounting controls. Completion of computer simulations is required.

**HMCA 1309 Introduction to Hospitality Industry and Quality Customer Service 3-0-3**  
Introduction to HMCA is a survey course designed to provide general information about the career fields within the hospitality industry. The course also offers a program in Quality Customer Service. An optional NRA certification exam is offered.

**HMCA 1331 Fundamentals of Food Theory - Part A 1-8-3**  
Lab fee, uniforms, and professional tools are required. Basic menu items such as soup and sauces are prepared. Other areas of concentration are beverage service, table service, plate and table presentation, accountability of food stores. Prerequisite: HMCA 1202 or concurrent enrollment.

**HMCA 1332 Fundamentals of Food Theory - Part B 1-8-3**  
Lab fee, uniforms, and professional tools are required. Basic menu items such as soup and sauces are prepared. Other areas of concentration are beverage service, table service, plate and table presentation, and accountability of food stores. Prerequisite: HMCA 1202 or concurrent enrollment.

**HMCA 1333 Culinary Principles - Part A 1-8-3**  
Lab fee, uniforms and professional tools are required. Elements of the course include: quantity food preparation, assorted cuisine and baking. Prerequisite: HMCA 1601.

**HMCA 1334 Culinary Principles - Part B 1-8-3**  
Lab fee, uniforms and professional tools are required. Elements of the course include: quantity food preparation, assorted cuisine and baking. Prerequisite: HMCA 1601.

**HMCA 1601 Fundamentals of Food Theory 1-19-6**  
Lab fee, uniforms, and professional tools are required. Basic menu items such as soup and sauces are prepared. Other areas of concentration are beverage service, table service, plate and table presentation, and accountability of food stores. Prerequisite: HMCA 1202 or concurrent enrollment.

**HMCA 1606 Culinary Principles 1-19-6**  
Lab fee, uniforms and professional tools are required. Elements of the course include: quantity food preparation, assorted cuisines and baking. Prerequisite: HMCA 1601.

**HMCA 2164 Capstone Option HMCA 1-0-1**  
A capstone course requiring an individual project and comprehensive exam.

**HMCA 2262 Sugar Art 1-3-2**  
Lab fee, uniforms, and professional tools are required. A course in practical instruction skill development in sugar work, Marzipan, chocolate, holiday confections and advanced cake decoration.

**HMCA 2301 Management Practice HMCA 1-15-3**  
Lab fee and uniform are required. This course is designed as a real-time management lab where students will be expected to form a management team and operate an operational area for a semester. Team work and organizational skills are necessary. Scheduled for an average of 20 hours per week, the student assumes a leadership role with an emphasis on supervisory techniques. Hours include mornings, nights, some weekends and holidays. Department approval is required.

**HMCA 2302 Hospitality Industry Computer System 2-4-3**  
This course provides an overview of information needs of lodging properties and food service establishments; addresses essential aspects of computer systems, such as hardware and generic applications; focuses on computer-based property management systems for both front- and back-office functions; and focuses on computer-based restaurant management systems for both service- and management-oriented functions. Lab fee required.

**HMCA 2303 Restaurant/Institutional Management Practicum (Field Experience) 1-20-3**  
Lab fee. Scheduled for an average 20 of hours per week in an industry internship for the semester. Hours include weekends, mornings, nights, and holidays. Department approval is required.

**HMCA 2304 Nutrition for HMCA Professionals 3-0-3**

A study of dietary needs; the role of proteins, fats, carbohydrates, minerals, and vitamins; factors to be considered in proper selection and preparation of foods for maximum nutritional value. An optional NRA certification exam is offered.

**HMCA 2305 Facility Design, Layout and Security 3-0-3**

Fundamentals of equipment layout for optimum production and operational efficiency. This course will include procedures to design and decorate remodeling projects.

**HMCA 2306 Hospitality Accounting I 3-0-3**

Provides the background in hospitality accounting including business transactions, use of accounting records, journalizing, posting, and analysis of financial statements.

**HMCA 2307 Tourism Management 3-0-3**

The course includes information on travel accommodations, products, procedures, available transportation industries, ticketing, and tour packages.

**HMCA 2308 Hospitality Industry Sales Promotion 3-0-3**

A course designed to develop an understanding of what must be done to mesh production and consumption in the United States. The business activities that direct the flow of goods and services from the producer to the ultimate consumer are analyzed. Coordination of personal selling, advertising, produce design, market research, and customer relations/services are the individual ingredients of sales promotion, and each is examined in detail. Advertising is studied as the force that creates prospects, converts these prospects into customers, and keeps customers returning and buying. An optional NRA certification exam is offered.

**HMCA 2309 Lodging and Tourism Practicum (Field Experience) 1-20-3**

Lab fee. Scheduled for an average 20 hours per week in an industry internship for the semester. Hours include weekends, mornings, nights and holidays. Department approval required.

**HMCA 2310 Property Management 3-0-3**

A study of housekeeping and guest sensitive areas of property management is conducted. Property maintenance is considered as it applies to guest impression to the overall operation.

**HMCA 2311 Culinary Arts Practicum (Field Experience) 1-20-3**

Lab fee. Scheduled for an average 20 hours per week in an industry internship for the semester. Hours include weekends mornings, nights, and holidays. Department approval required.

**HMCA 2335 Culinary Arts - Part A 1-8-3**

Lab fee, uniforms, and professional tools are required. The course will concentrate on: buffets, exhibition work, Garde Manage and baking.

**HMCA 2336 Culinary Arts - Part B 1-8-3**

Lab fee, uniforms, and professional tools are required. The course will concentrate on: buffets, exhibition work, Garde Manage and baking.

**HMCA 2350 Hospitality Advertising 3-0-3**

Sales promotion, interior decor, types and uniformity of service, food and beverage display, menu and room styling.

**HMCA 2351 Cafeteria Management 3-0-3**

This course points out the specific differences between an industrial cafeteria and a conventional restaurant and explains how to cope with the unusual problems of industrial and institutional feeding. Prerequisite: HMCA 1601.

**HMCA 2352 Catering 2-3-3**

Lab fee, uniforms, and professional tools are required. Presentation of food and beverages from menus typically used in catering operations.

**HMCA 2353 Advanced Buffet Catering 2-3-3**

Lab fee, uniforms, and professional tools are required. Presentation of food and beverages from menus typically used in complex catering operations.

**HMCA 2354 Recreational Services 2-4-3**

This course includes the study of the needs of guest recreation and entertainment, available space for these activities, cost of operation and maintenance, layout and design, and direct and indirect benefits.

**HMCA 2355 Diet Manager, Field Experience 1-10-3**

Lab fee, uniforms, and professional tools are required. Field experience in diet therapy under the supervision of a registered dietician.

**HMCA 2356 Advanced Baking 1-6-3**

Lab fee, uniforms, and professional tools are required. A course designed to add to commercial baking skills of the student.

**HMCA 2357 Hospitality Accounting II 2-3-3**

A course that covering financial statements and accounting practices of partnership and corporate entries. Computer simulation laboratory will utilize industry based software. Prerequisite: HMCA 2306.

**HMCA 2358 Dietary Food Service Operations 3-0-3**

Looks at food service operations through dietary and clinical needs of the patients.

**HMCA 2359 Diet Therapy 3-0-3**

A practical "how-to" course tailored to the unique needs of current and future dietary managers.

**HMCA 2360 Cake and Pastry Decorating 1-6-3**

Lab fee, uniforms, and professional tools are required. A course of practical instruction and skill development in birthday, wedding, and special-occasion cakes as well as pastry decoration.

**HMCA 2361 Catering - Baking 1-6-3**

Lab fee, uniforms, and professional tools are required. A practical study in manufacturing pastry and baking products on a commercial basis.

**HMCA 2363 Capstone Option HMCA 3-0-3**

A capstone course requiring an individual project and comprehensive exam.

**HMCA 2365 Current Topics HMCA 3-0-3**

A course on current industry topics.

**HMCA 2612 Advanced Culinary Arts 1-19-6**

Lab fee, uniforms, and professional tools are required. The course will concentrate on buffets, exhibition work, Garde Manage and baking. Prerequisite: HMCA 1606.

**(HUMA) Humanities****HUMA 1315 Introduction to Fine Arts 3-0-3**

This is an introductory course designed to give the student a fundamental understanding of the creation and appreciation of diverse modes of expression through the visual arts, within the context of Fine and Applied Arts.

## **(INDU) Industrial Fundamentals**

### **INDU 1400 Industrial Fundamentals 3-3-4**

Required introductory course for students in most of the Industrial Technology curriculums. The course includes common hand and power tools, precision measuring devices, electrical test equipment, thread repair, special tools, soldering, bearings and seals, use of publications, basic shop math, and industrial trades safety. This course is a prerequisite or corequisite for all Industrial Technology AAS Degree curriculums except Air Conditioning and Automotive Service and Repair.

## **(JAPN) Japanese**

### **JAPN 1311 Elementary Japanese I 3-0-3**

Introduction to Japanese with emphasis on conversation, grammar, and the written forms. There will also be readings of simple texts dealing with Japanese life and culture.

### **JAPN 1312 Elementary Japanese II 3-0-3**

Continuation of Japanese conversation, grammar and the written forms. Emphasis is on reading texts dealing with Japanese life and culture. Prerequisite: JAPN 1311.

### **JAPN 1370 Introduction to Japanese 3-0-3**

This course provides students with conversational and academic skills in basic "survival" Japanese by presenting the language in a practical, contextual setting. Grammar is reinforced by example with emphasis on understanding the structure and mastery of the structure in conversation.

### **JAPN 1411 Beginning Japanese I 4-2-4**

This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

### **JAPN 1412 Beginning Japanese II 4-2-4**

Elementary grammar is completed. Pronunciation drill and reading-based conversation are continued. Common conversational phrases are stressed. Prerequisite: JAPN 1411.

### **JAPN 2311 Intermediate Japanese 3-0-3**

Review and application of skills in listening, comprehension, and speaking; introduction to advanced grammar patterns; and acquisition of additional Japanese characters.

## **(LAW) Law Enforcement**

### **LAWE 1201 Defensive Tactics 1-2-2**

This course is designed to provide the student with defensive and protective philosophies to better protect the public and criminal justice personnel against illegal force. Self-defense techniques, safe arrest procedures, citizen contact, and proper prisoner transportation techniques, along with humane methods of handling disturbed persons, will be presented. The legal and humane use of limited force will be stressed at all times.

### **LAWE 1301 Introduction to Criminal Justice 3-0-3**

History and philosophy of criminal justice and ethical considerations. Crime defined, its nature and impact. Introduction and career orientation to the multifaceted agencies involved in the administration of criminal justice: law enforcement, courts, prosecution and defense, probation and parole, and corrections.

### **LAWE 1302 Criminal Investigation I 3-0-3**

Investigative theory, collection and preservation of evidence, sources of information, interview and interrogation, uses of forensic sciences, and case and trial preparation.

### **LAWE 1303 Legal Aspects of Law Enforcement 3-0-3**

Police authority, responsibilities, constitutional constraints, law of arrest, search and seizure, police liability, and examples of case law that currently affect police decisions will be reviewed.

### **LAWE 1304 The Courts and Criminal Procedures 3-0-3**

The judiciary in the criminal justice system, structure of the American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence and sentencing.

### **LAWE 1306 Correctional Systems and Practices 3-0-3**

Corrections in the criminal justice system, organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, current and future issues.

### **LAWE 1307 Crime in America 3-0-3**

American crime problems in historical perspective, social and public policy factors affecting crime; impact and crime trends, social characteristics of specific crimes, and crime prevention.

### **LAWE 1308 Fundamentals of Criminal Law 3-0-3**

A study of the nature of criminal law, philosophical and historical development; major definition and concepts; classifications, elements, and penalties of crime using Texas statutes as illustrations, and criminal responsibility.

### **LAWE 1309 Police Systems and Practices 3-0-3**

Analyses of the police profession, organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues facing police agencies.

### **LAWE 1310 Criminal Investigation II 3-0-3**

Modern methods and skills required for criminal investigation including discovery methods, developing and lifting latent fingerprints, criminal scene sketches, the use of plaster and silicone rubber for reproducing evidence at the crime scene, use of modern investigation aids, and techniques of interviews and interrogations. Prerequisite: LAW 1302.

### **LAWE 1312 Commissioned Security Officer Course 2.5-0.5-3**

This course is designed to have the student meet the requirements specifically identified in the state of Texas Commissioned Security Officer Training Manual and the provisions of the Private Investigators and Private Security Agencies Act, Article 4413 (29bb) V.A.C.S. as amended.

### **LAWE 1315 Street Survival 3-0-3**

This course stresses the preparation, planning and appropriate reactions to hazardous situations for on-duty police officers. Students will gain awareness of the conditions which lead to personal injury and death. Instruction will be given to improve the student's tactical procedures and safeguards while performing police work.

### **LAWE 2101 Emergency Medical Aid 1-1-1**

This course focuses on the first aid fundamentals that will be helpful to patrol officers in the event of a first aid emergency situation. Procedures recommended by the American Red Cross will be used as guidelines for this course.

### **LAWE 2201 Firearms 1-2-2**

This course is designed to introduce the student to the skills and techniques of firearms used in the protection of the public and criminal justice personnel. Students will fire various weapons under precision and police combat conditions. The importance of safe weapons handling and the danger of not adopting a mature attitude towards firearms will be stressed at all times. The intelligent, legal, and moral use of police firearms will be emphasized at all stages of teaching and firing.

### **LAWE 2301 Probation and Parole 3-0-3**

Development, organization, operation, and results of systems of probation and parole as substitutes for incarceration. Role of probation and parole officers and their function within the entire criminal justice system are examined.

**LAW 2303 Criminal Justice Seminar 3-0-3**

A problems course dealing with current criminal justice trends, issues, and literature. Prerequisite: Consent of the Department Chair. This course may be repeated for credit when course topics deal with different problems and issues.

**LAW 2304 Juvenile Procedures 3-0-3**

The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; case disposition; juvenile statutes; and court procedures.

**LAW 2306 Traffic Planning and Administration 3-0-3**

This course consists of the application of traffic problems from the administrative point of view including traffic engineering, education, and enforcement at the supervisory level.

**LAW 2308 Patrol Administration 3-0-3**

Discussion of the administration of surveys, special problems arising while the officer is on patrol, improvement in patrol methods, observation of persons and things, preventive techniques, methods of handling complaints, and the development of contacts.

**LAW 2310 Correctional Control and Administration 3-0-3**

The course prepares the student to perform supervisory functions related to control of prisoners and contraband, segregation and accountability of prisoners, procedures required at correctional facilities, emergency measures, prisoner privileges, and the records and reports of the detention center.

**LAW 2312 Homicide Investigation 3-0-3**

This course emphasizes the investigative process and teamwork required in analyzing the homicide crime scene. It addresses the roles of the various forensic disciplines in relation to the investigator as well as the functions of the crime laboratory. Additionally, students will learn how to analyze wounds and injuries in drawing conclusions about the cause of death.

**LAW 2313 Illegal and Controlled Substances 3-0-3**

This course presents an in-depth approach to the medical and legal aspects of illegal and controlled substances. Students will learn how to identify dangerous drugs by their distinct characteristics and explain their effects on the human body. Most importantly, students will learn the theories and principles of drug law enforcement which will prepare them to bring a drug case successfully to prosecution.

**LAW 2314 Organized Crime 3-0-3**

This course provides the student with information on the growth and development of organized crime and its affect on the majority of crimes committed in the U.S. today. Students will also learn about the different facets of organized crime and will analyze how federal and state authorities are fighting it.

**LAW 2315 Interviewing and Interrogation Techniques 3-0-3**

This course provides the student with an understanding of the communication process and the techniques for improving listening skills. This knowledge has a direct application for the police officer who must conduct interviews/interrogations on the job.

**LAW 2319 Anti-Terrorism 3-0-3**

This course explores the origins, philosophies, and current trends in worldwide terrorism and hostage-taking incidents. Role playing exercises allow students to utilize all the course material in "hands-on" hostage negotiation situations.

**LAW 2350 First Responder 3-0-3**

This course covers health knowledge regarding individual and group welfare. It is concerned with the principles and practices of first aid treatment of the sick and injured by the non-medically-trained individual. Emphasis is given to the preventive aspects as well as care following an injury or illness.

**(LEGA) Paralegal/Legal Assistant****LEGA 1302 Legal Office Ethics and Management 3-0-3**

This course will provide an overview of the ethical considerations applicable to the legal assistant; office organization, specialized bookkeeping, and accounting for attorneys' fees and billing procedures, scheduling and calendaring, personnel management, proofreading, investigations management and file preparation, management and organization procedures for specialized areas of law, special considerations with respect to attorney's trust account, preparation of law office forms, checklist and files, and disbursement on behalf of clients.

**LEGA 1304 Principles of Family Law 3-0-3**

The legal aspects of divorce and annulment, separation, custody, habeas corpus, support, alimony, tax consulting, out-of-state divorces and jurisdiction service will be discussed. Students will draft separation and custody agreements, as well as the other documents involved in divorce proceedings.

**LEGA 1305 Law of Real Property and Real Estate Transactions 3-0-3**

Study of the law of real property and in-depth survey of the more common types of real estate transactions and conveyances such as deeds of trust; drafting problems involving projects related to the subject matter; study of the system for recording of and searching for public documents.

**LEGA 1306 Criminal Law 3-0-3**

A study of criminal law and procedure for the legal assistant who may work in a prosecutor's office, a public defender's office, or a criminal defense firm. Includes essential elements of crime, criminal liability, criminal responsibility and capacity to commit a crime, defenses, and criminal punishment. This course will also instruct the student on how to investigate, prove-up and litigate criminal cases.

**LEGA 1307 Civil Litigation 3-0-3**

This course is an overview of civil litigation in both state and federal court with particular emphasis on the areas in which a legal assistant can assist the trial attorney. Particular attention is paid to preparation for litigation (interviewing client and witnesses, reviewing public information), discovery proceedings (interrogatories, requests for admissions, depositions and document production) pre-trial proceedings (motions to dismiss, motions for summary judgment, pre-trial orders), and trial (witnesses and exhibits). Attention is also devoted to practical techniques required to cope with protracted or complex litigation, including organization of pleadings, documents and depositions; preparation of summaries, chronologies and indices; and maintaining complex files in an orderly manner. Mention is made of the legal theories involved in complex litigation (e.g., products liability, civil rights, securities and antitrust). Principal emphasis is on procedural techniques rather than substantive areas of law. Prerequisite: LEGA 1401.

**LEGA 1308 Consumer Protection and Bankruptcy 3-0-3**

A study of consumer law for the paralegal, business person, and consumer, of legislation and legal rights surrounding the purchase of consumer goods and services bought primarily for personal, family, or household purposes including the Consumer Credit Protection Act, the Uniform Consumer Credit Code, and the Fair Debt Collection Practices Act, as well as a survey of federal and state Deceptive Trade Practices Acts and automobile "lemon" laws. Students will also learn the appropriate federal, state, and local administrative bodies to contact in case of consumer problems and some of the procedures involved. This course will also give an in-depth study of both debtor and creditor rights in debt relief and bankruptcy. Prerequisite: LEGA 1401.

**LEGA 1309 Military Law I** 3-0-3  
An introduction to the military legal system for junior military legal clerks as well as civilian practitioners who deal with the military. Topics covered include the military Judge Advocate General's Corps organization and structure, the structure and operation of field offices, Staff Judge Advocates, Post Judge Advocates, and Command Judge Advocates. An introduction to the Uniform Code of Military Justice and appropriate military regulations covering military law subjects is included. This course will also serve as an introduction to the practice of military justice, claims, legal assistance, administrative law, and civil law as practiced in a typical Staff Judge Advocate's Office.

**LEGA 1401 Introduction to Paralegalism** 4-0-4  
This course provides a general introduction to the law with emphasis on the role of the legal assistant. To give a Legal Assistant student the necessary legal background, topics to be covered include the American system of law (constitutional law, statutory law, criminal law and tort law); court systems; terminology and court procedures. General concepts of law are introduced for students with no specific prior legal knowledge. This serves as the introductory course for the Legal Assistant program.

**LEGA 1403 Military Law II** 4-0-4  
A more in-depth look at the operation and management of the military's Judge Advocate General's Corps. Detailed coverage of military justice, claims, legal assistance, administrative law, and civil law, with detailed review of the Uniform Code of Military Justice and appropriate military and federal regulations. Preparation of legal documents used in the military adds a practical aspect to the material, which will include charge sheets, claims forms, and administrative and disciplinary appeals. Prerequisite: LEGA 1309.

**LEGA 2101 Special Topics in Legal Assistance** 1-0-1  
A problems course dealing with recent developments and topics of current interest in the Legal Assistance field. The course may be repeated when topics vary.

**LEGA 2301 Tort and Personal Injury** 3-0-3  
A study of the fundamental principles of evidence and of the law of torts and insurance, including special research assignments related to the subject matter; consideration of the techniques of investigation involved in the lawyer's handling of tort and insurance claims and workmen's compensation; a study of the various forms of pleadings involved in commencing such claims in court actions. This course will also cover how to use cameras, tape recorders, video equipment and other investigative equipment to document cases and gather evidence. Prerequisite: LEGA 1401. Corequisite: LEGA 2406.

**LEGA 2302 Contract Law and the Uniform Commercial Code** 3-0-3  
A study of the law of personal property, contracts, including those special forms related to the law of sales and credit transactions, special drafting problems of various instruments and legal research projects; and a survey of the Uniform Commercial Code and its effect on the course subject matter. Prerequisite: LEGA 1401.

**LEGA 2303 Business Organizations** 3-0-3  
A study of the formation and operation of corporations, partnerships, limited partnerships, business trusts and other business vehicles, including a survey of the fundamental principles of law applicable to each; special research projects related to the subject matter. Prerequisite: LEGA 2302.

**LEGA 2307 Juvenile Law** 3-0-3  
A systematic introduction to juvenile law and the comparative difference between the criminal and juvenile justice systems. The course will cover both state and federal legislation, substantive and procedural laws, and related issues within the public education disciplinary system. Coordinating agencies for the effective handling of minors as well as directions of the future will also be covered. Prerequisite: LEGA 1306.

**LEGA 2308 Legal Assistant Seminar** 3-0-3  
A problems course dealing with recent developments and current issues in the law and the Legal Assistance field. Topics of interest may cover: Law of the Workplace, Constitutional Law, and Environmental Law. The course may be repeated when topics vary.

**LEGA 2401 Techniques of Legal Practice** 3-3-4  
This course emphasizes the techniques of legal writing and coordinates with other Legal Assistant courses to provide specialized training in the actual preparation of legal documents on a case method. Questions of statutes of limitation, clients, interviews and interview forms, complaints, interrogatories, depositions, answers, motions, orders to show cause, third-party practice, orders, medical records, judgments, pre-trials, settlements, and releases are some of the topics discussed. Prerequisites: LEGA 1307, 1401, and 2306.

**LEGA 2405 Wills, Trust and Probate** 3-3-4  
This course presents the basics of wills, trust and probate with which a Legal Assistant will have to deal. The forms and principles of law for wills and trusts are covered. The organization and jurisdiction of the State Probate Court are studied. The administration of estates under State Probate Law is analyzed and estate and inheritance taxes are reviewed. Prerequisites: LEGA 1307 and 1401.

**LEGA 2406 Techniques of Legal Research** 3-3-4  
This course focuses on the importance of legal research as part of a legal assistant's responsibilities. It explores principles of legal research, kinds of law books, components of a law book, citations, reading and finding constitutional law, regulations, cases, law and statutory law. Students will learn how to use the various legal research tools such as indices, digests, Shepards, and treatises. An in-depth research and writing assignment provides a hands-on application of the studies. Prerequisite: LEGA 1401. Corequisite: LEGA 1307.

## (MATH) Mathematics

**MATH 1314 College Algebra** 3-0-3  
Topics include theory of equations, exponential and logarithmic functions, systems of linear equations, matrices and determinants, arithmetic and geometric sequences, binomial theorem, permutations and combinations. This course is recommended for students intending to enroll in advanced mathematics courses. Prerequisite: DSMA 0303 or equivalent, or acceptable placement test score.

**MATH 1316 Trigonometry** 3-0-3  
Wrapping, circular, and trigonometric functions; polar coordinates; identities; applications to oblique and right triangles; inverse functions; and trigonometric equations. Prerequisite: DSMA 0303 or equivalent.

**MATH 1324 Finite Mathematics I** 3-0-3  
Topics include linear systems, matrices, linear programming, set theory, counting theory, probability, statistics. Prerequisite: DSMA 0303 or equivalent.

**MATH 1342 Elementary Statistics** 3-0-3  
Collection and tabulation of data, bar charts, graphs, sampling, averages, dispersion, correlation, index numbers, normal curve, probability, inferential statistics, applications. Prerequisite: DSMA 0303 or equivalent.

**MATH 1348 Analytic Geometry** 3-0-3  
An algebraic treatment of straight lines, circles, parabolas, hyperbolas, ellipses. Transformation of coordinates, curve sketching, polar coordinates. Prerequisite: MATH 1316 or equivalent and MATH 1314.

**MATH 1376 Finite Mathematics II** 3-0-3  
A continuation of Finite Mathematics I. Introduction to statistics, graphing, vectors, matrices, and linear programming. Prerequisite: MATH 1324.

**MATH 2320 Differential Equations** 3-0-3  
Fourier series, linear differential equations, Laplace transforms, and series solution, all with applications. Prerequisite: MATH 2315.

**MATH 2413 Calculus I****3-1-4**

A first course in differential and integral calculus. Topics include rectangular coordinates and functions, limits, continuity, derivatives, the Mean Value Theorem, integrals, the Fundamental Theorem of Calculus, and applications of integrals. This course meets four hours per week---three in lecture and one in lab activities to include the use of computers, graphing calculators, and/or problem solving discussions. Prerequisite: MATH 1348 or equivalent, or concurrent enrollment in MATH 1348.

**MATH 2414 Calculus II****3-1-4**

A second course in differential and integral calculus. Topics include derivatives and integrals of transcendental functions, techniques of integration, improper integrals, infinite series, parametric equations, and polar coordinates. This course meets four hours per week---three in lecture and one in lab activities to include the use of computers, graphing calculators, and/or problem solving discussions. Prerequisite: MATH 2413 or equivalent.

**MATH 2415 Calculus III****3-1-4**

A third course in differential and integral calculus. Topics include vectors and curves in the plane, solid analytic geometry, and vectors in space, functions of several variables, multiple integration, and vector analysis. This course meets four hours per week---three in lecture and one in lab activities to include the use of computers, graphing calculators, and/or problem solving discussions. Prerequisite: MATH 2414 or equivalent.

**(MGMT) Management****MGMT 1111 Leadership Development I****(MGMK 1101)****1-1-1**

The purpose of this course is to develop an awareness of respect for education in marketing and distribution which will contribute to occupational competence, and to promote understanding and appreciation for the responsibility of citizenship in our competitive free enterprise system. It is intended for students who are preparing themselves for careers in middle management, sales, advertising, finance, retailing, wholesaling, insurance, real estate, fashion merchandising, food service management, hotel/motel management, and other marketing-oriented occupations. Students will be expected to participate in a student vocational leadership organization, Junior Collegiate Distributive Education Clubs of America (DECA). Consent of the Department Chair is required for admission.

**MGMT 1112 Leadership Development II****(MGMK 1102)****1-1-1**

This course is a continuation of MGMT 1111. Prerequisite: MGMT 1111 and consent of the Department Chair.

**MGMT 1113 Leadership Development III****(MGMK 1103)****1-1-1**

This course is a continuation of MGMT 1112. Prerequisite: MGMT 1112 and consent of the Department Chair.

**MGMT 1158 Training Manager's Workshop****1.5-0-1**

This course is designed for battalion and company commanders and S-3s for their training management duties and stresses training status, goals, priorities, resources and short- and long- term plans.

**MGMT 1171 Personnel Counseling Seminar****1-0-1**

This course covers the major theories of counseling and the use of basic influence and attending skills.

**MGMT 1204 Setting Objectives and Goals****2-1-2**

This course is designed to provide managers with the processes involved in defining objectives, determining desired goals, and analyzing performance training to enhance achievement of those goals and objectives.

**MGMT 1205 Analysis of Training Requirements****2-1-2**

This course is designed to provide managers with techniques for determining organizational and personnel training requirements; stresses the definition and assurance of needs that are compatible with available resources.

**MGMT 1206 Professional Resource Management****2-0-2**

This course is designed to provide managers with the capability to assist subordinates in the screening, selection, evaluation, and application of employee training programs.

**MGMT 1301 Organization and Management****3-0-3**

Organizational structure can have considerable impact on the manner in which an organization functions. Students study the complex variables over which managers can exercise control to determine proper structure. While surveying management topics such as planning, decision-making, organizing, staffing and controlling, this course deals with how the organization must be structured to fit its environment and operation.

**MGMT 1302 Safety (OSHA)****3-0-3**

A study of safety as it relates to the military, industrial, and business communities. Special emphasis will be given the requirements of the Occupational Safety and Health Act as it affects management and employees.

**MGMT 1303 Fundamentals of Industrial Management****3-0-3**

Application of the system's approach of the unification of all areas from human factors to environmental factors are covered, along with the manner and methods through which work can be simplified, yet made more meaningful and satisfying.

**MGMT 1304 Work Organization****3-0-3**

This course is designed to provide a general introduction and orientation to principles of job analysis, performance evaluation, job evaluation and salary administration, and how these affect the work situation. Work measurement and work standard techniques are studied, as well as flow process and work distribution methods, quantity and quality control planning and the current impact of governmental guidelines upon such procedures.

**MGMT 1305 Introduction to Management****3-0-3**

This course is designed to give the student a knowledge and understanding of management theories and functions which are essential to the person planning a career in business or industry.

**MGMT 1306 Human Relations****3-0-3**

This fundamental management course examines topics such as morale, motivation, communications, leadership, and change as they relate to managerial decision making.

**MGMT 1307 Insurance****3-0-3**

Introduction to theory and practice of insurance, including life, fire, automobile, and personal and business risk.

**MGMT 1308 Small Business Management (MGMK 1308)****3-0-3**

Methods and applications of financial management in a small business. Primary emphasis on internal controls and sales accountability. Secondary emphasis on budgeting, forecasting, effective sales/labor ratios, licensing requirements.

**MGMT 1309 Income Tax****3-0-3**

Income tax legislation; present income tax laws and regulations; treasury decisions, court decisions and departmental rulings; income tax problems and returns.

**MGMT 1311 Retail Management (MGMK 1311) 3-0-3**  
This course is for persons intending to develop careers in retailing or marketing as well as for those seeking an introduction to the field of retailing. It contains an overview of retailing--from the development and growth of retailing to an analysis of the consumer. The impact of innovation and competition on retail institutions is studied, as well as the influence of fashion, computers, and consumerism in the industry. Other subjects include types of ownership, types of merchandise sold, the human and physical sides of store management, merchandising, selling, advertising, sales promotion, profit and pricing techniques.

**MGMT 1381 Management of Performance-Oriented Training 3-0-3**  
A course designed to provide a performance-oriented approach of managing training in which the manager learns to establish performance-oriented objectives, tests, and follow-up evaluations.

**MGMT 1382 Briefing Techniques, Aids and Devices 3-0-3**  
A course designed to provide the manager with the capability of employing proper briefing methods and to develop the skills required to produce briefing aids including charts, graphs, posters, slides, filmstrips, transparencies, opaques, and other media.

**MGMT 1383 Evaluation of Instruction and Training 3-0-3**  
A course designed to provide the manager with the rationale, methods, and procedures for evaluation the effectiveness and efficiency of instruction training. Emphasis will be directed toward evaluating performance-oriented training and developing the suggestions for improvement which can be provided to management.

**MGMT 1384 Setting Objectives and Goals 3-0-3**  
A course designed to provide managers with the processes involved in defining objectives, determining desired goals, and analyzing performance training to enhance achievement of goals and objectives.

**MGMT 1385 Analysis of Training Requirements 3-0-3**  
Designed to provide managers with techniques for determining organizational and personnel training requirements. Defining needs and ensuring compatibility with available resources will be stressed.

**MGMT 1386 Professional Resource Management 3-0-3**  
A course designed to provide managers with the capability to assist subordinates in the screening, selection, evaluation, and application of employee training programs.

**MGMT 1387 Professional Development of the Manager 3-0-3**  
A course designed to equip leaders with skills necessary to provide assistance to subordinates in problem solving. Emphasis will be placed on effective, active and passive performance by leaders to correct mistakes or reinforce good performance causing more motivated individuals.

**MGMT 1388 The Training System Management 3-0-3**  
A course designed to provide managers with methods required to plan, organize, staff, influence, and control training. The main purpose will be develop a plan and employ limited resources to accomplish systems objectives.

**MGMT 1389 Managerial Theories 3-0-3**  
A course designed to provide examination of managerial theories to include management functions, decision-making skills, problem-solving techniques, and performance standard oriented approaches to management.

**MGMT 2101 Stress Management 1-0-1**  
This course identifies the factors causing stress, shows how to interpret the signs of stress and explains the basic fundamentals involved in the management of personal and organizational stress. The instruction covers the most common causes of stress in the work place and prescriptive measures that can be taken by the manager to obtain high performance and low stress levels within the organizational setting.

**MGMT 2102 Management Seminar 1-0-1**  
A course that deals with trends, issues, advancements and literature in the management field.

**MGMT 2103 Time Management 1-0-1**  
This course enables the student to understand the role time plays in one's personal and professional life and to perceive time as the one element that cannot be created in greater quantities. Instruction includes a study of the constraints that time places over individual lives and the techniques that managers and workers can employ to accommodate their goals.

**MGMT 2104 Income Tax 1-0-1**  
This seminar is designed as a practical, hands-on approach to the basic fundamentals of income tax preparation for the individual to complete the Form 1040, 1040A, or the 1040EZ. Information for all aspects of this preparation will be provided in a general manner and will not delve into specific minutia of income tax law. The instructor will be able to answer most of the tax questions asked by the students. However, it must be realized that the instructor is not a tax attorney or an accountant. For specific legal advice concerning a complex tax questions, the student will be encouraged to seek professional assistance.

**MGMT 2105 Briefing Techniques, Aids and Devices 1-0-1**  
A course designed to provide students with a review of instructional techniques, selection of contents of instruction, preparation of lesson plans and instructional devices or aids to provide a good learning environment.

**MGMT 2150 Trainer's Workshop (TW) 1.5-0-1**

**MGMT 2151 Platoon Trainer's Workshop 1.5-0-1**

**MGMT 2152 Training Supervisor's Workshop 1.5-0-1**

**MGMT 2161 Unit and Organizational Supply 2.5-0-1**  
To provide the students with the skills and knowledge to accomplish the duties required of unit and organizational supply personnel.

**MGMT 2162 Personal Finance Management 1.3-0-1**  
Develops an understanding of the personal business activities and actions that affect personal and family accounts, budgets, budgetary controls, bank accounts, charge accounts, borrowing, buying, and investing

**MGMT 2164 Army Personnel 1-0-1**  
This course is designed to provide the student with the knowledge of fundamental personnel management concepts used in industry, the Army, and U.S. Civil Service.

**MGMT 2172 Introduction to Management Theory 1-0-1**  
This course will help to increase the student's ability to relate to and manage personnel. Instruction is provided in management theories, functions and roles. Leadership abilities, motivation methods, and time management will be emphasized.

**MGMT 2173 Leadership Communication In Management 1-0-1**  
This course will provide communications skills and counseling and stress management techniques to enhance the student's ability to manage personnel effectively.

<b>MGMT 2174 Supervisory Management</b>	<b>1-0-1</b>	This course is designed to update the student's supervisory education and to prepare him/her for more complex problems whether they are economic, technical, professional, scientific or educational.
<b>MGMT 2255 Platoon Trainer's Workshop</b>	<b>2-0-2</b>	
<b>MGMT 2256 Training Supervisor's Workshop</b>	<b>2-0-2</b>	Provides training management for the medium-sized organization (battalion) including long- and short-range plans, I.R.C., and ARTFP standards.
<b>MGMT 2257 Trainer's Workshop (TW)</b>	<b>2.3-0-2</b>	
<b>MGMT 2258 Training Manager's Workshop</b>	<b>2-0-2</b>	Provides training management information for battalion-sized units including long- and short-range goals, training assets, money and allocations, and ARTFP standards.
<b>MGMT 2259 Platoon Trainer's Workshop</b>	<b>2.3-0-2</b>	Provides management of training instruction at the platoon level including long- and short-range planning and ARTFP-integrated training for small groups.
<b>MGMT 2261 Leadership and Communications Seminar</b>	<b>2-0-2</b>	Upon completion of this course, the student will be better able to communicate with and supervise personnel. The student will have an increased interpersonal awareness, interact better in group situations, organize work and manage time better, and be able to reduce stress.
<b>MGMT 2300 Credit and Collections</b>	<b>3-1-3</b>	This course covers the elements of mercantile and consumer credit organization of a credit department, sources of credit information, collection tolls and procedures.
<b>MGMT 2301 Marketing Principles</b>	<b>3-0-3</b>	This is an introductory course to the practices and principles of contemporary marketing. Instruction includes marketing planning and information; buyer behavior and market segmentation; product/service, pricing, distribution, and promotional strategies; and marketing in special settings. Instructional methods include lectures, discussions, and case study analysis.
<b>MGMT 2302 Human Resource Management</b>	<b>3-0-3</b>	The dynamic role of management as it relates to people, with emphasis on the management aspects important to the line executive or supervisor. Human resource functions and procedures are viewed in the light of management objectives while human resource management is treated as an active and dynamic process which is motivated by basic human drives.
<b>MGMT 2303 Law and Legal Assistance</b>	<b>3-0-3</b>	Nature and scope of the law, court systems, law of contracts, principal and agent as relates to the military. Explanation of bailments, carriers, mortgages, securities, negotiable instruments, banks and banking, wills and estates. The procedures of obtaining and acquiring legal assistance for both military and civilian cases in or out of the continental limits of the United States of America are addressed. Emphasis is placed on the knowledge required by the supervisor to counsel subordinates in the areas of law and legal assistance.
<b>MGMT 2304 Labor-Management Relations</b>	<b>3-0-3</b>	Labor relations aspects of personnel management are emphasized; selection and placement, discipline and morale, promotions, lay-offs, job evaluation, incentive systems, profit sharing, and the influence of collective bargaining and legislation on personnel policies. Methods used by organized labor and employers in industrial conflicts.
<b>MGMT 2305 Business Law I</b>	<b>3-0-3</b>	This course deals with the nature and scope of the law, court systems, law of contracts, principal and agent, and business organizations including partnerships and corporations. Texas community property laws are also covered.
<b>MGMT 2306 Business Law II</b>	<b>3-0-3</b>	Additional studies in law of business, dealing with bailments, carriers, mortgages, suretyship, negotiable instruments, banks and banking, wills and estates, sales, bankruptcy. There is no prerequisite for this course.
<b>MGMT 2307 Life Insurance</b>	<b>3-0-3</b>	Principles of life insurance, business and personal use in insurance; classification and analysis of policies, reserve and policy values; organization and administration of life insurance companies.
<b>MGMT 2309 Supervision</b>	<b>3-0-3</b>	A course designed to provide an understanding of planning work leadership, decision making, work problem solving, human behavior, and personnel relations.
<b>MGMT 2310 Personnel Counseling</b>	<b>3-0-3</b>	This course is designed to improve the listening and decision-making skills of managers and supervisors to help employees achieve greater productivity and satisfaction in their jobs and quality of work life (QWL).
<b>MGMT 2312 Fundamentals of Systems Management</b>	<b>3-0-3</b>	Introduction to the "systems" concept of management and integration of this concept with the more traditional "principles" approach. This course combines theory and application of systems management and focuses on systems as they exist in many fields such as education, law enforcement, military, industry, and a variety of nonprofit organizations.
<b>MGMT 2314 Ethics in Management</b>	<b>3-0-3</b>	A study of the field of business management as it relates to major ethical theories. The course provides actual case studies in which ethical principles are used in solving today's business problems.
<b>MGMT 2315 Public Relations</b>	<b>3-0-3</b>	A course designed to prepare students for jobs in the business world covering various principles and processes of contemporary public relations as well as effective means of influencing the public. The course traces the origins of public relations and discusses current and future trends. It looks at public relations standards, a code of ethics, and public relations as a profession.
<b>MGMT 2316 Management Applications I (MGMK 2316)</b>	<b>1-5-3</b>	This course is a management laboratory that emphasizes necessary management decision-making skills that are necessary for the modern manager to successfully deal with resource problems in the work place and career field. The course is designed for students desiring to further their management training by applied learning techniques utilizing decision making case studies, computer-assisted models, or other instructional techniques. Prerequisite: Consent of the Department Chair.
<b>MGMT 2317 Management Applications II (MGMK 2317)</b>	<b>1-5-3</b>	The second in a two-part management laboratory sequence that emphasizes management decision-making skills for various business career fields. Instruction is individually tailored to meet the specific career needs of the student. The course is designed for students desiring to further their management training by applied learning techniques utilizing decision making case studies, computer-assisted models, or other instructional techniques. Prerequisites: MGMT 2316 and consent of the Department Chair.

**MGMT 2318 Total Quality Management 3-0-3**

This course is designed to provide an understanding of the total quality management methods and procedures necessary to produce quality products and services. Students will learn how to establish management controls that result in minimum deviation from desired standards, calculate the true costs of producing an inferior product, analyze symptoms of organizations that lack commitment to total quality management, and define the role of each level of management and of each employer.

**MGMT 2319 Small Business Accounting 3-0-3**

A course designed to introduce small business owners to basic accounting/financial information necessary to the successful operation of a business. Topics covered include, but are not limited to, cost behavior, cost-volume-profit relationships, budgeting, relevant costs, pricing decisions, payroll accounting and taxes. Prerequisite: ACCT 2301.

**MGMT 2320 Business Operations 3-0-3**

This course is an introduction and practical approach to small business operations and management. Subjects include the analysis of one's personal skills, experience, and expectations in starting a business; technical and managerial skills necessary to run a business profitably; marketplace statistics; gathering and analyzing data; purchasing and inventory; record keeping; and product marketing. Other subjects include tax considerations for small business; revenue sources; and measures of profitability. Members of the Students in Free Enterprise (SIFE) organization that participate during the entire training program can be awarded credit for this course with the approval of the SIFE Faculty Advisor.

**MGMT 2321 Entrepreneurship and Business Plan Development 3-0-3**

This course involves the development and presentation of a plan to create or expand a business. It provides the student with an opportunity to develop and demonstrate a mastery of the essential competencies required for business opportunity analysis, the development of a marketing plan, and the development of a business financial plan. Students will prepare a business plan for a business that they want to develop or expand. Prerequisite: MGMT 1308 or Consent of the Department Chair.

**MGMT 2322 Salesmanship 3-0-3**

This is a course in professional personal selling designed for those students who will most likely represent organizations that sell products to the public and other organizations.

**MGMT 2351 Advanced Leadership 3-0-3**

Presents advanced leadership and management techniques, organizational goals, problem solving, communications and management of changes.

**MGMT 2354 Management Problems 3-0-3**

This course is designed to develop and improve the soldiers' skills so they may effectively execute the duties required of military managers.

**MGMT 2358 Trainer's Workshop (TW) 2.5-0-3**

This course provides management of training for the small unit, individual Skill Qualification Test (SQT), and small group performance-oriented training.

**MGMT 2381 Job Performance and Motivation 3-0-3**

A course designed to provide managers with the capability of applying approaches that influence employee job performance through the adoption of appropriate leadership and motivation techniques, and assessment of group and individual behavior patterns. Communication problem-solving techniques in a changing society as they affect the day-to-day efforts of subordinates will also be explored.

**MGMT 2382 Individual Orientation Techniques 3-0-3**

A course designed to provide managers with the skills required to orient personnel in individual job tasks and to facilitate the continuity of the organization's functions.

**MGMT 2383 Group Orientation Techniques 3-0-3**

A course designed to develop managerial skills required in group training efforts. Emphasis is placed on integrating individual experiences into the group orientation efforts. Prerequisite: MGMT 2382.

**MGMT 2384 Assessing of Training Standards, Goals and Objectives 3-0-3**

A course designed to provide managers with the ability to establish realistic and relevant training standards. The relationship among organizational goals, training objectives, and training standards are emphasized to ensure continuity of effort. Personnel involved in the process and appropriate strategies and methodologies in the establishment of training standards are also stressed. Prerequisite: MGMT 1381.

**MGMT 2385 Management Training Theory 3-0-3**

This course provides the manager with a basic knowledge of management training theories and application of the aspects of training which influence effectiveness of management and the learning process.

**MGMT 2386 Management Learning Strategies 3-0-3**

This course is designed to provide managers with a systematic approach to training program development. Theoretical and empirical modes of learning and topics related to social problems affecting the design of instruction environments will be emphasized.

**(MILS) Military Science Management****MILS 1101 Military Science I 1-0-1**

A study of first-line to mid-level supervision. The course reviews procedures in the context of the standard supervisory roles of directing, problem solving, decision making, and personal relations at the primary leader level.

**MILS 1102 Fundamentals of Leadership 1-0-1**

An introduction to the theories of motivation, with a focus on their practical application reflected in current military leadership fundamentals. Includes an overview of the traits, techniques, and styles common to all effective leaders.

**MILS 1105 Introduction to Military Law 1-0-1**

An introduction to the Uniform Code of Military Justice. An overview of the military judicial system, the responsibilities at each level of the organization, and its unique qualities in comparison with civilian legal systems.

**MILS 1106 Naval Science I 1-0-1**

A study of first-line to mid-level supervision. This course reviews leadership procedures and the standard supervisory roles of directing, problem solving, decision making, and personal relations in the context of the U.S. Navy.

**MILS 1107 Air Force Science I 1-0-1**

A study of first-line to mid-level supervision. This course reviews leadership procedures and the standard supervisory roles of directing, problem solving, decision making, and personal relations in the context of the U.S. Air Force.

**MILS 1108 Military History of the Sinai 1-0-1**

This course provides a historical survey of the military history of the Sinai Peninsula with emphasis on the cultural, political, and economic conditions which contributed to the regional conflicts.

**MILS 1201 Military Science II 2-0-2**

Fundamental course on the basics of applied management in the context of the military, its missions, organization, and operations. The course concentrates on the basic leadership level of employing personnel and equipment. Prerequisite: MILS 1101 or consent of the instructor.

**MILS 1202 Briefing Techniques, Aids and Devices 2-0-2**

Combination of formal instruction, practical exercises, and critiques designed to teach and improve briefing techniques. Includes information, staff, and decision briefings as well as appropriate and effective use of visual aids.

**MILS 1203 Professionalism and Responsibility 2-0-2**

An organizational behavior approach that examines the beliefs, values, and norms of the organization; how they impact on the individual; and implications for managers. Military culture is used throughout the course to illustrate how professionalism and responsibility are defined and measured by the degree of similarity between the individual and the organization.

**MILS 1204 Management of Performance Oriented Training 2-0-2**

Course teaches performance-oriented training by looking at the roots of the performance approach as developed by the military and its relation to current learning theory. The course includes a detailed study of the task/conditions/standards model, lesson plans, aids, and devices.

**MILS 1205 Evaluation of Instruction and Training 2-0-2**

Follow on course to MILS 1204, to provide the leader with the tools needed to evaluate the effectiveness of training, reassess proficiency, and adjust training program goals and objectives.

**MILS 1207 Professional Development of the Manager 2-0-2**

Course explores effective training of junior-level leaders. Studies the tools of proper delegation of tasks and assistance to subordinates in problem solving. Emphasis will be placed on the effectiveness of active and passive styles of leadership in reinforcing good performance and motivating towards excellence.

**MILS 1208 The Training Management System 2-0-2**

A systematic approach to training that consolidates the supervisory and management levels into a short-range training program. Course looks at military training management systems, time management cycles, and the training schedule development process.

**MILS 1209 Managerial Theories 2-0-2**

An examination of relevant managerial theories to include the management function, decision making, problem-solving techniques, quality control, and performance standard oriented approaches to management.

**MILS 1210 Naval Science II 2-0-2**

Fundamental course on the basics of applied management in the context of the U.S. Navy, its missions, organization, and operations. The course concentrates on the basic leadership level of employing personnel and equipment.

**MILS 1211 Naval Science III 2-0-2**

An applied management course at the advanced leadership level, concentrating on mid-level management skills required to employ assets at higher levels of command in the U.S. Navy. Course covers situational analysis, staffing procedures, communications, planning and controlling operations, and evaluations.

**MILS 1212 Air Force Science II 2-0-2**

Fundamental course on the basics of applied management in the context of the U.S. Air Force, its missions, organization, and operations. The course concentrates on the basic leadership level of employing personnel and equipment.

**MILS 1213 Air Force Science III 2-0-2**

An applied management course at the advanced leadership level, concentrating on mid-level management skills required to employ assets at higher levels of command in the U.S. Air Force. Course covers situational analysis, staffing procedures, communications, planning and control, in relation to Air Force operations.

**MILS 1300 Military Organization and Staff****Functions 3-0-3**

A study of organizational structure and its impact on the manner in which an organization functions. The course uses the Department of Defense, and one of its component service branches as an example of an organization structured to fit its environment; how this structure impacts on such management functions as planning, decision making, staffing, and control.

**MILS 1301 U.S. Military Heritage, Mission and Organization 3-0-3**

A case study in organizational development. Course traces the evolution of the U.S. military through history with emphasis on the impact of events and technological developments on the organization's mission, structure, traditions, and customs.

**MILS 2101 Stress Management 1-0-1**

Supervisory course that identifies the factors causing stress, how to interpret the signs of stress and the basic fundamentals of personal and organizational stress management. The instruction includes the most common causes of stress in the work place and preventative measures a leader can take to control them.

**MILS 2103 Time Management 1-0-1**

This course teaches the fundamentals of effective time management for the leader and for the organization as a whole, by defining time as a perishable resource that cannot be increased or decreased. Course emphasizes the role time plays in making the organization both effective and efficient as well as the constraints it places over our personal and professional lives.

**MILS 2109 Military Science Seminar 1-0-1**

A problems course dealing with current military science trends, issues, and literature. This course may be repeated for credit in courses dealing with different problems and issues.

**MILS 2201 Military Science III 2-0-2**

An applied management course at the advanced leadership level, concentrating on the mid-level management skills required to employ assets at higher levels of command. Course covers situational analysis, staffing procedures, communications, planning and controlling operations, and evaluations.

**MILS 2202 Military Science IV 2-0-2**

Strategic level application of management science tools in the military to establish and achieve long-range objectives. Course is geared toward senior-level decision making and includes management by objective, planning and control of delegated operations, and creative problem solving.

**MILS 2203 Group Orientation Techniques 2-0-2**

This course provides practical application of group dynamics to developing moral and esprit de corps. Course examines why groups form, how they develop, their reward power over individuals, and how they can be used as a motivation tool by the leader to enhance job satisfaction.

**MILS 2204 The Noncommissioned Officer 2-0-2**

A case study in supervisory role development. Course traces the role of the noncommissioned officer in the U.S. military to include duties, authority, responsibilities, and the relationship with officers, warrant officers, and service members. Emphasis is given to the impact of mission changes and technological developments that have continuously redefined the supervisory role.

**MILS 2205 The Commissioned Officer 2-0-2**

A case study of middle- and upper-level management roles. Course covers the responsibilities, duties and roles at each level of commissioned officer service. The functional relationship between management and supervision is explored in an examination of officer, warrant officer, and noncommissioned officer relationships.

**MILS 2206 Management Learning Strategies 2-0-2**

An course for leaders who want to explore further into the arena of training in organizations, including needs assessment, instruction techniques, and evaluation procedures. Training for career changes, cross training, and the implications of fair labor standards are also addressed.

**MILS 2207 Contemporary Social Issues in the Military 2-0-2**

This course examines the current social and political issues in the United States and the U.S. military. Discussion will center on how the issues might effect policy and decisions. Course subject matter is drawn from current events and varies from term to term.

**MILS 2208 The U.S. Military in a Contemporary World 2-0-2**

This course examines the strategic interests of the United States and NATO, current foreign affairs issues and their impact on the U.S. military. Course subject matter is drawn from current events and will vary from term to term.

**MILS 2209 Individual Orientation Techniques 2-0-2**

Designed to provide the leader with the skills necessary to manage change within an organization. Course examines the turbulence caused by personnel turnover and automation system transition on the organization and how to cope with it. Orientation programs are evaluated for their effectiveness in providing expedient and productive transition for the individual and the unit.

**MILS 2210 Assessing Training Standards, Goals and Objectives 2-0-2**

Combination of formal instruction and practical exercises in establishing objectives under conditions of constrained resources. An in-depth look at the military mission essential task list approach for defining training goals, setting strategies, and assessing effectiveness.

**MILS 2211 Job Performance and Motivation 2-0-2**

An in-depth personnel management study of motivational theories and their application to the military. Includes both older needs theory and more current equity and group behavior models and their implications for leaders in today's environments.

**MILS 2261 Leadership and Communication Seminar 2-0-2**

Two-weekend seminar of role playing exercises with critiques and feedback designed to improve communication skills, enhance interpersonal awareness, and give the manager more effective group interaction, organization, and supervisory skills.

**MILS 2301 Comparative Military Systems 3-0-3**

A comparison of selected military systems in the world. Course examines military spending, macroeconomic factors, defense planning, regional alliances and strategies of various countries.

**MILS 2309 Military Science Seminar 3-0-3**

A problems course dealing with current military science trends, issues, and literature. This course may be repeated for credit in courses dealing with different problems and issues.

**MILS 2351 Advanced Leadership 3-0-3**

Advanced management study with an in-depth look at the differences and similarities of leadership and management. Includes all elements of the management function, leadership styles, and communication.

**MILS 2354 Management Problems 3-0-3**

Case study approach in practical application of management theory to the everyday problems of managers. Study groups work out their own solutions and exchange ideas with other groups in presentation and critique forums.

**MILS 2371, 2372 Military History I and II 3-0-3**

Courses designed to give the noncommissioned officer a concept of the development of the U.S. Army from pre-revolutionary days to the present, the effect of society on the structures and development of the Army, and the history of the development of tactics and strategies based on modern technology.

**MILS 2373 U.S. Naval Heritage 3-0-3**

This course will enhance the student's appreciation and understanding of the American naval heritage. It will study the events, individuals, technological advances, and schools of thought which have affected American naval development.

**(MISC) Microcomputer Technology****MISC 1100 Special Topics 0-3-1**

Recent developments and topics of current interest taught in a laboratory format. May be repeated when topics vary.

**MISC 1131 Introduction to UNIX 1-0-1**

An introduction to the fundamentals of UNIX. Topics include an overview of system structure, file systems, shells, shell scripts, communications, system administration, and a comparison of UNIX and MS-DOS capabilities. Provides practical lab exercises by topic.

**MISC 1141 MS-DOS Fundamentals 1-1-1**

A coverage of commonly used DOS commands and procedures. Introduces basic DOS concepts, disk preparation, storing and retrieving of information on disk, and file manipulation.

**MISC 1306 Introduction to BASIC 2-2-3**

Offers an introduction to programming in BASIC for the student interested in using a computer at home, in a small business or as a tool in a subject area such as math or science. Applications will illustrate personal computing techniques. Introduction to programming for non-computer majors.

**MISC 1400 Microcomputer Fundamentals 3-3-4**

Provides the student with fundamental skills needed in designing computer programs. Focus will be on problem analysis and developing algorithms for the step-by-step solution to problems. Students will learn to use a microcomputer under the MS-DOS operating system in a hands-on environment. A microcomputer language will be used for programming and debugging.

**MISC 1403 Introduction to Computer Science and Programming 3-3-4**

Introductory programming for Microcomputer Technology majors. Problem solving, algorithm development, pseudocode, and flowcharting. In-depth coverage of a high-level language through programming assignments.

**MISC 1404 COBOL Programming 3-3-4**

Provides the student with skills and fundamentals in solving business data processing problems using COBOL. The student becomes effective in COBOL programming techniques involving sequential files, single- and double-dimension table handling, and control breaks.

**MISC 1405 Computer Concepts and Analysis 3-3-4**

Provides the essential foundation for computer science majors in computer concepts, terminology, and business computer systems. Students will be introduced to word processor and spreadsheet software.

**MISC 1406 Computer Organization and Architecture 3-3-4**

A study of hardware and software characteristics of digital computers. Designed to give the student an understanding of how the fundamental principles by which computers work affect and govern programming techniques. Topics include data representation, machine instruction types, fetch and execution cycles, interrupt schemes, metaprograms, I/O handling, and assembler concepts. Prerequisites: COSC 1403 or MISC 1451 or COSC 1401.

**MISC 1420 Word Processing for Microcomputers 3-3-4**

An entry-level course designed to teach the use of a current state-of-the-art word processor in a hands-on environment to include installation of word processor software.

**MISC 1430 Spreadsheets for Microcomputers 3-3-4**

An entry-level course designed to teach the use of a current state-of-the-art spreadsheet in a hands-on environment to include installation of spreadsheet software.

**MISC 1440 Data Base for Microcomputers 3-3-4**

An introduction to state-of-the-art Database Management Systems for the Microcomputer. Major topics include database design, table creation, query and view construction, form building and report generation. Theory topics are reinforced with hands-on exercises. Prerequisites: MISC 1420, MISC 1430, or MISC 1450.

**MISC 1450 Microcomputers for Business 3-3-4**

An introduction to the use of the microcomputer as a business tool. Designed specifically for the business oriented, this course will provide familiarity with the microcomputer and its use in the business sector. A hands-on introduction to the use of a word processor, spreadsheet, and database is provided. Types of hardware and software available for business will be studied.

**MISC 1451 Introduction to Microcomputer Programming 3-3-4**

Introductory programming course for Microcomputer Technology Major. Problem solving, algorithm development, pseudocode and flowcharting. An in-depth look at a high-level language through programming assignments.

**MISC 1454 PASCAL Programming 3-3-4**

A thorough coverage of structured programming. Emphasis on top-down programming and modular organization. Major topics to be covered include constants, variables, expressions, input and output, self-contained procedures, making decision (REPEAT-UNTIL, WHILE-DO and FOR loops), data types, arrays, character strings, records and set pointers, and disk files. Prerequisite: MISC 1451 or COSC 1403.

**MISC 1460 Desk Top Publishing 3-3-4**

Designed to provide the student with a working knowledge of desk top publishing. Taught in a hands-on environment. Prerequisite: MISC 1420 or MISC 1450.

**MISC 1461 Operating Systems 3-3-4**

A study of microcomputer operating systems. Topics include commands, system configuration, batch files, directory and hard disk management. Prerequisite: 8 semester hours of computer courses.

**MISC 2110 Topics in Computer Science Laboratory 0-3-1**

A laboratory course. May be offered as a stand-alone laboratory course or in conjunction with MISC 2310 when a laboratory is required to develop the topic.

**MISC 2301 Information Center Management 3-0-3**

Defines the infrastructure of information centers and describes their role and responsibilities in terms of assisting professionals with varying degrees of computer knowledge in using computer technology in the performance of their job function. Prerequisite: MISC 1450.

**MISC 2302 Hardware/Software Selection and Acquisition 3-0-3**

Selection and acquisition of hardware and software. Topics include capacity sizing of key hardware components, compatibility considerations, lease/purchase alternatives, in-house versus packaged software, documentation and training provided, vendor responsibilities and support, future upgrade capability to support growth, procurement proposals and contracting. Prerequisite: 12 semester hours of MISC courses or equivalent experience.

**MISC 2310 Topics in Computer Science 3-0-3**

A study of recent developments and topics of current interest in computer science.

**MISC 2401 Advanced COBOL 3-3-4**

Offers the student of COBOL programming an in-depth study of the theory, programming techniques, and programming efficiencies that will be required of the commercial COBOL programmer. Thorough coverage is given to file design and the special features of ANSI COBOL language. Emphasis is placed on multi-dimensional table handling, searching and sorting techniques, and indexed file manipulation. Structured design and programming will be stressed. Prerequisite: MISC 1404.

**MISC 2402 Systems in the MIS Environment 3-3-4**

This course examines advanced systems including data base, distributed processing, teleprocessing, local area networks, management information systems and decision support systems. Emphasis will be placed on data base management systems through the development of a data base project. Prerequisite: 12 semester hours of computer courses.

**MISC 2453 Visual BASIC Programming 3-3-4**

An introduction to the Visual BASIC Programming Language. Major topics include forms and controls, selection, loops, data access and menus. Theory topics are reinforced with hands-on programming exercises. Prerequisite: Minimum of one other programming language.

**MISC 2454 Basic Communications, Networking and Internet 3-3-4**

A Study of data communications and networking of microcomputer systems. Topics include communications hardware and software, using the Internet as a resource tool, and Local Area Networks. Prerequisite: MISC 1461.

**MISC 2455 Microcomputer Field Projects 1-9-4**

This course consists of practical applications in the field of microcomputers. It is designed to fit the career objectives of the student. Prerequisite: Consent of the Department Chair.

**MISC 2456 C Language Programming I 3-3-4**

The use of C in application programming. Major topics include fundamental flow-control constructions, statement grouping, decision making, looping with termination test at top (WHILE, FOR) or bottom (DO), and case selection (SWITCH). Detailed use of functions with internal, external, and global variables. Address arithmetic and call by reference will also be covered. Prerequisite: COSC 1406 and one other programming language.

**MISC 2457 Programming with ADA\* 3-3-4**

An introduction of the basic syntax and semantics of ADA programming language. The design and use of the language will be the general theme of the course while programming exercises will be used to illustrate specific implementations of the language structure. Emphasis will be on importance of style and linguistic considerations. Prerequisite: MISC 1454.

\* ADA is a registered trademark of the United States Department of Defense.

**MISC 2458 C Language Programming II 3-3-4**

An introduction to Object-Oriented Programming (OOP) using the C++ Language. Major topics include data structures, classes, inheritance, encapsulation and polymorphism. Theory topics are reinforced with hands-on programming exercises. Prerequisite: MISC 2456.

**MISC 2460 Multimedia Applications 3-3-4**

An introduction to the fundamentals of multimedia. Provides the student with an understanding of how computer graphics, computer-generated sounds, and digitized sources can be combined into effective multimedia presentations. Student will be required to design, produce, and present a multimedia presentation. Prerequisites: MISC 1450 and MISC 1460.

## (MTNT) Maintenance Technology

### MTNT 1401 Carpentry I 3-3-4

This course is designed to provide the student with an understanding of carpentry as a trade. Included are the use of special tools, measuring devices, wood types, building and concrete forms, framing, floor, wall, and roof construction. Prerequisite or Corequisite: INDU 1400.

### MTNT 1402 Electricity 3-3-4

This course is designed to provide the student with a working knowledge of electrical installation as well as service and repair procedures for residential and light commercial buildings. Prerequisite or Corequisite: INDU 1400.

### MTNT 1411 Basic Masonry I 2-7-4

This course is an introduction to the highly skilled craft of masonry including safety methods, practices, and proper use of tools and equipment. The student will learn the names, uses, and maintenance of basic masonry tools and equipment. A basic study of masonry materials and federal and state guidelines regulating the trade, safety, and building plans.

### MTNT 1412 Basic Masonry II 2-6-4

This course covers the theory and practical applications of the basic bricklaying techniques such as mortar making and spreading, setting courses and laying of brick. Prerequisite: MTNT 1411.

### MTNT 1413 Intermediate Masonry I 2-7-4

The student will learn the theory and practical applications of laying straight leads and walls using standard bonds, and the construction of piers. Use of plain and reinforced mortars will be emphasized. Prerequisite or Corequisite: MTNT 1412.

### MTNT 2402 Carpentry II 3-3-4

This course is a continuation of MTNT 1401, with additional emphasis placed on cabinetry, exterior and interior trim and finish work, including door and hardware installation. Prerequisite: INDU 1400 and MTNT 1401.

### MTNT 2403 Plumbing I 3-3-4

This course covers the theory and practical application of plumbing maintenance, service and repair procedures for residential and light commercial buildings. Topics of study include plastic, copper, cast iron, galvanized pipe, cutting and joining. Prerequisite or Corequisite: INDU 1400.

### MTNT 2404 Painting and Refinishing 3-3-4

This course covers the theory and practical application of painting and refinishing residential and light commercial buildings. Topics of study include various types of paint, surface preparation, proper maintenance of and refinishing damaged finished surfaces. Prerequisite or Corequisite: INDU 1400.

### MTNT 2405 Foundations, Framing, and Roofing 3-3-4

The student will be introduced to form fabrication, setting foundations, setting piers and castings, and will practice framing and roofing residential buildings. Students will also have practical exercises in roofing. The course also covers modern placement methods of materials for structures and building layout systems. Prerequisite: MTNT 1401.

### MTNT 2406 Building Materials and Estimating 3-3-4

This course begins with a study of the manufacturing process, uses, and selection of building construction materials, and continues with exercises in estimating areas, volumes of concrete, foundations, linear and board foot requirements, wall framing, ceiling joists, roof rafter and sheathing material requirements. Prerequisite: MTNT 1401.

### MTNT 2407 Interior-Exterior Finishing 3-3-4

A study of interior and exterior finishing. The topics covered are cornice treatment, roof coverings, window installation and trim, exterior doors, frames and trim, exterior wall coverings which are typically applied by carpenters, insulation and vapor barriers, wall and ceiling coverings, floor finishing, stair finishing, shelving and interior trim. The student will also learn the importance of trueing areas where cabinets will be installed. Prerequisite or Corequisite: MTNT 2405.

### MTNT 2408 Mill Cabinetry Construction and Installation 3-3-4

This course is designed to teach the student to plan operations, select lumber and perform a variety of operations and basic skills required in mill cabinetry. Students will receive practical experience in layout, construction, installation of cabinet work and applying plastic laminates. Prerequisite or Corequisite: MTNT 2402.

### MTNT 2409 Milling Machines 3-3-4

Practical application in the basic skills in the set-up and operation of wood machines. The course also covers mass production of fine cabinetry, mill work, and wood finishing. Prerequisite or Corequisite: MTNT 2408.

### MTNT 2410 Plumbing II 3-3-4

This course is a continuation of MTNT 2403, Plumbing I, with additional emphasis on "roughing-in" procedures. Course content will include hot and cold water systems, natural gas and propane piping, circulation systems, measuring and citing in accordance with established codes, cost estimating, and sprinkler systems. Also included are the procedures involved in cast iron pipe installation. Prerequisite: MTNT 2403.

### MTNT 2414 Intermediate Masonry II 2-6-4

This course is designed to develop the student's ability to lay brick to the line, alone and in group situations with maximum efficiency, safety, and work quality. The theory and practice of special construction such as bond patterns, fireplaces, arches, and lintels will be covered. Prerequisite: MTNT 1413 or consent of the Department Chair.

### MTNT 2415 Advanced Masonry I and Blueprint Reading 2-7-4

This course will teach the masonry student the skills necessary to estimate the amount and cost of building material, mortar, equipment, and other materials required to complete a given job. The student will also learn how to estimate man-hours required and convert all of the above estimate man-hours required and convert all of the above estimations into a monetary figure used in bidding and how to use estimation formulas. It also provides additional training in bricklaying. Prerequisite: MTNT 2414 or consent of the Department Chair.

### MTNT 2416 Advanced Masonry II and Estimating 2-7-4

This course will teach the masonry student the skills necessary to estimate the amount and cost of building material, mortar, equipment and other materials required to complete a given job. The student will also learn how to estimate man-hours required and convert all of the above estimations into a monetary figure used in bidding and how to use estimation formulas. It also provides additional training in bricklaying. Prerequisite: MTNT 2415 or consent of the Department Chair.

## (OADM) Office Administration

### **OADM 1131 Beginning Typing I 1.5-1.5-1**

A beginning course in touch typing. The course will emphasize mastery of machine parts and the keyboard.

### **OADM 1133 Intermediate Typing I 1.5-1.5-1**

A continuation of Beginning Typing I and Beginning Keyboarding/Data Entry. Students will increase typing accuracy and speed. Prerequisite: WOPO 1303 or OADM 1232 or ability to type 25 WPM for five minutes with no more than five errors.

### **OADM 1232 Beginning Typing II 1.5-1.5-2**

A continuation of Beginning Typing I. Special emphasis will be placed on speed development. The course will include an introduction to letter writing, tabulating, and preparing manuscripts. Prerequisite: OADM 1131.

### **OADM 1234 Intermediate Typing II 1.5-1.5-2**

A continuation of Intermediate Typing I. Students will compose and type business letters, tabulations, and manuscripts of a more demanding nature. Prerequisite: OADM 1133.

### **OADM 1301 Beginning Shorthand 2-4-3**

An introduction of shorthand. Students will receive initial training in shorthand emphasizing reading, writing, theory principles, brief forms and related activities.

### **OADM 1302 Intermediate Shorthand 2-4-3**

Students will continue shorthand training and reinforcement of theory. Prerequisite: OADM 1301 or equivalent.

### **OADM 1305 Information & Records Management 2-4-3**

This course introduces the basic principles and procedures concerning the management of document-based information systems required in the operation of an organization's business. Topics include document-based records classification, storage, maintenance, and disposition methods and systems; electronic database creation, storage, and retrieval technology; and the principles for the selection of records equipment and supplies. Prerequisite: WOPO 1303 or equivalent.

### **OADM 1306 Office Procedures and Applications 3-0-3**

Designed for the student who wishes to prepare for a career as an executive secretary. The following topics are covered: human relations skills, meetings and conferences, travel arrangements, information sources, mail handling, telephone techniques, receptionist duties, scheduling, and related office routines.

### **OADM 1308 Business Correspondence 3-0-3**

A course designed to teach effective business writing and to give practice in composing all types of business correspondence, including e-mail. Students will also complete research using the Internet.

### **OADM 1309 Business Mathematics and Calculating Machines 2-4-3**

Technique familiarization in the operation of the most commonly used office machines; computation; calculations; speed drills; percentages, discounts and net values, chain discounts, business forms. Emphasis will be placed on business mathematics.

### **OADM 2301 Advanced Shorthand 3-3-3**

Students will improve their ability to take dictation and transcribe mailable copy. Theory principles, brief form derivatives, vocabulary development, speed building, mailable transcription, and office-style dictation will be emphasized. Prerequisite: OADM 1302 or equivalent.

### **OADM 2302 Advanced Typewriting 3-3-3**

This course includes advanced work in such specialized production as tabulation, interoffice correspondence, manuscripts, telegrams, legal forms, medical forms, special interoffice forms, and additional work on the arrangement of business letters with special features. Prerequisite: WOPO 1303 and 1304.

### **OADM 2304 Office Accounting I 2-4-3**

Elementary principles of accounting, journalization, posting, statements, special journals, subsidiary ledgers, payroll records, and payroll taxes. Special emphasis is placed on personal, family and small business accounting systems.

### **OADM 2305 Office Accounting II 2-4-3**

Analysis and recording of business transactions, use of the journal and ledgers, trial balance and worksheets, adjusting and closing entries, accounting statements, introduction to partnership and corporate accounting, special journals and ledgers, business papers and business procedures relating to accounting voucher systems. Prerequisite: OADM 2304 or equivalent.

### **OADM 2307 Automated Office Management 3-0-3**

This course includes topics of instruction in office procedures, work simplification, selection and training of office workers, supervision, office etiquette and ethics, and an analysis of the responsibilities of the manager, secretary, clerk, and other office workers. The student is given an opportunity to relate knowledge, information and skills acquired in previous academic courses. Special emphasis is placed on the relationship of various systems that affect the modern office. Prerequisite: Sophomore standing or consent of the Department Chair.

### **OADM 2350 Machine Shorthand 3-3-3**

This course is an introduction to machine shorthand. It covers machine shorthand principles, abbreviations, derivatives, word lists, and operation of the machine. The students develop dexterity and keyboard mastery through writing practices and laboratory exercises.

## (PHED) Physical Education

### **PHED 1100 Football and Basketball 0-3-1**

### **PHED 1101 Volleyball and Softball 0-3-1**

### **PHED 1102 Beginning Badminton 0-3-1**

### **PHED 1103 Beginning Bowling 0-3-1**

### **PHED 1104 Soccer 0-3-1**

### **PHED 1105 Folk and Square Dancing 0-3-1**

### **PHED 1106 Beginning Swimming 0-3-1**

### **PHED 1107 Beginning Tennis 0-3-1**

### **PHED 1108 Beginning Golf 0-3-1**

### **PHED 1109 Basketball & Soccer 0-3-1**

### **PHED 1110 Karate I 0-3-1**

### **PHED 1113 Country Western Dance 0-3-1**

### **PHED 1114 Volleyball 0-3-1**

### **PHED 1115 Basketball 0-3-1**

<b>PHED 1117 Hunting</b>	<b>0-3-1</b>	<b>PHED 1308 Sports Officiating</b>	<b>3-0-3</b>
<b>PHED 1118 Jogging/Walking</b>	<b>0-3-1</b>	Theory and practice in techniques of officiating. Prerequisite: Officiating experience.	
<b>PHED 1119 Racquetball</b>	<b>0-3-1</b>	<b>PHED 1336 Principles of Recreational Leadership</b>	<b>3-0-3</b>
<b>PHED 1120 Body Building</b>	<b>0-3-1</b>	A study of the development of skills and leadership ability in various program areas of recreation including boys clubs, city recreation and armed forces. It describes recreational leadership methods for selection and discusses the principles and problems of recreational supervision.	
<b>PHED 1123 Advanced Bowling</b>	<b>0-3-1</b>	<b>PHED 2155 Water Safety</b>	<b>0-3-1</b>
<b>PHED 1124 Advanced Swimming</b>	<b>0-3-1</b>	Participation and instruction in advanced aquatic activities. Prerequisite: Demonstrated swimming skills.	
<b>PHED 1125 Intermediate Tennis</b>	<b>0-3-1</b>	<b>(PHIL) Philosophy</b>	
<b>PHED 1126 Advanced Golf</b>	<b>0-3-1</b>	<b>PHIL 1301 Introduction to Philosophy</b>	<b>3-0-3</b>
<b>PHED 1127 Tumbling</b>	<b>0-3-1</b>	A general introduction to critical and reflective thinking as applied to the basic problems of existence and the meaning of human life and institutions; study of methods and types of evidence utilized by authority, intuition, revelation, reason and scientific methods, and a study of the nature of philosophy, including its relation to religion, science, and art.	
<b>PHED 1129 Advanced Badminton</b>	<b>0-3-1</b>	<b>PHIL 1304 World Religions</b>	<b>3-0-3</b>
<b>PHED 1130 Physical Conditioning</b>	<b>0-3-1</b>	A survey course dealing with the origins, tenets, and development of the major world religions. Deductive method used to understand religion as a phenomenon in man's life. Discussion of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam.	
<b>PHED 1131 Aerobics</b>	<b>0-3-1</b>	<b>PHIL 2303 Logic</b>	<b>3-0-3</b>
<b>PHED 1132 Varsity Athletics</b>	<b>0-3-1</b>	Nature and methods of correct reasoning, deductive proof, inductive proof, fallacies, and arguments.	
<b>PHED 1133 Weight Training</b>	<b>0-3-1</b>	<b>PHIL 2306 Introduction to Ethics</b>	<b>3-0-3</b>
<b>PHED 1134 Cycling</b>	<b>0-3-1</b>	Study of basic principles of the normal life, with critical examination of traditional and current theories of the nature of goodness, happiness, duty, and freedom.	
<b>PHED 1135 Archery</b>	<b>0-3-1</b>	<b>PHIL 2307 Introduction to Social and Political Philosophy</b>	<b>3-0-3</b>
<b>PHED 1136 Figure Control</b>	<b>0-3-1</b>	Critical examination of the major theories concerning the organization of societies and government.	
<b>PHED 1138 Rhythmic Aerobics</b>	<b>0-3-1</b>	<b>PHIL 2374 Old Testament Survey</b>	<b>3-0-3</b>
<b>PHED 1140 Karate II</b>	<b>0-3-1</b>	A general survey of Old Testament as to origin, literature, and history with special study of the institutions, religions, and natural life of the Hebrew people.	
<b>PHED 1151 Scuba Diving</b>	<b>0-3-1</b>	<b>PHIL 2375 New Testament Survey</b>	<b>3-0-3</b>
PADI open-water, level-one certification may be earned.		The course will consist of a survey of all the New Testament literature: the Synoptic Gospels, the Johanne Corpus, Acts, the Pauline Letters, and the General Epistles. Particular attention will be given to the methods and results of contemporary critical research in the New Testament studies. Thus, both primary sources (New Testament documents) and secondary literature on the New Testament will be used.	
<b>PHED 1152 Scuba Diving II</b>	<b>0-3-1</b>		
Advanced open-water certification may be earned.			
<b>PHED 1301 Foundations of Physical Education</b>	<b>3-0-3</b>		
A course which introduces the student to the fields of health, physical education, and recreation. Emphasis on the scope and organization of professional activities, opportunities and qualifications of the professional physical educator.			
<b>PHED 1304 Foundations of Health</b>	<b>3-0-3</b>		
A fundamental course in principles and problems of healthy living. Emphasis on current information and research as it applies to individuals' daily lives.			
<b>PHED 1306 Safety and First Aid</b>	<b>3-0-3</b>		
Health, knowledge and practice with regard to individual and group welfare; personal hygiene; community health problems; communicable disease control; and health organizations. Instruction in American National Red Cross first aid methods for emergency treatments of injuries and sudden illness. American Red Cross certification in Community CPR and Standard First-Aid Responding to Emergencies may be earned.			

## (PHYS) Physical Sciences

### **PHYS 1305 Survey of Physics 3-0-3**

A survey of the fundamental principles of physics designed to acquaint students with the basic concepts of classical and modern physics which are the foundation of everyday phenomena.

### **PHYS 1311 Survey of Astronomy 3-0-3**

A non-mathematical approach to the solar system. Beginnings of astronomy, motions of celestial bodies, members of the solar system, atoms and light are studies. Planetarium and observatory are used in class.

### **PHYS 1312 Descriptive Astronomy 3-0-3**

A non-mathematical approach to the analysis of star light, stellar characteristics, stellar evolution, the sun, galactic characteristics, and cosmology are included. Planetarium and observatory are used in class.

### **PHYS 1315 General Physical Science 3-0-3**

This is an introductory course for students who need to acquire a basic understanding of the philosophy and methods of science. Topics will be selected from various fields of physical science and will cover a review of the basic principles and theories.

### **PHYS 1401 College Physics I 3-3-4**

Fundamentals of classical mechanics, heat, and sound are discussed. This course is primarily for students who plan to major in medicine, dentistry, veterinary medicine, pharmacy, and for all other students needing a two semester course in physics. The course includes three hours of lecture and three hours of laboratory per week. Prerequisite: MATH 1316 or concurrent enrollment.

### **PHYS 1402 College Physics II 3-3-4**

A continuation of College Physics I, fundamentals of classical electricity, magnetism, light, wave-motion, atomic and nuclear physics are covered. Prerequisite: PHYS 1401 or consent of the Department Chair.

### **PHYS 1413 Environmental Science 3-3-4**

This is a one-semester lab course designed for the non-science major. Emphasis is placed on a global approach to principles and problems in our environment. Topics include energy resources, air and water pollutants, environmental causes of cancer, pesticides and other toxic chemicals, solid and hazardous wastes, noise limits, crowding, land use and abuse, economic considerations and some governmental regulatory agencies. Lab includes methods of measurement, analysis and interpretation of environmental data.

### **PHYS 1415 Physical Science 3-3-4**

This course is an introduction to the methods and philosophy of sciences and is designed for non-science majors surveying topics from physics, chemistry, geology, astronomy, and meteorology. Methods of instruction include practical laboratory experiments, computer applications, and guided discussions. This course is designed to provide development of skills needed for success in other science classes and for improving science literacy.

### **PHYS 2425 Modern Physics I 3-3-4**

Mechanics and heat for Science majors/minors and Engineering majors. Vector Algebra and Calculus are used. The course includes three hours of lecture and three hours of laboratory per week. Prerequisite: MATH 2313 or concurrent enrollment.

### **PHYS 2426 Modern Physics II 3-3-4**

Electricity, magnetism, wave-motion and light, an introduction to modern physics for Science majors and minors, and Engineering majors. Vector Algebra and Calculus are used. The course includes three hours of lecture and three hours of laboratory per week. Prerequisite: PHYS 2425 or equivalent.

## (PSYC) Psychology

### **PSYC 2301 Introduction to Psychology 3-0-3**

Basic principles of human experience and behavior involving biological, environmental and sociological studies. An overview course including an introduction to the major studies of psychology.

### **PSYC 2306 Understanding Human Sexuality 3-0-3**

The study of the physiological, sociological, and psychological aspects of human sexuality. Prerequisite: PSYC 2301, PSYC 2315, or consent of the Department Chair.

### **PSYC 2308 Child Growth and Development 3-0-3**

The purpose of this course is to develop an understanding of children and to engender a real interest in them. Consideration is given to the human organism as it develops physically, mentally, emotionally, and socially from birth through adolescence.

### **PSYC 2314 Life Span Development 3-0-3**

This course will study the relationship of the physical, emotional, social and mental factors of growth and development of children and throughout the life span.

### **PSYC 2315 Personality Adjustment 3-0-3**

A study of psychological concepts and principles related to healthy personality and social adjustments.

### **PSYC 2316 Psychology of Personality 3-0-3**

The study of various approaches to determinants, development, and assessment of personality. Prerequisite: PSYC 2301.

### **PSYC 2319 Social Psychology 3-0-3**

The study of individual behavior within the social environment.

## (REAE) Real Estate

### **REAE 1300 Real Estate Mathematics 3-0-3**

This course includes, but is not limited to, basic arithmetic skills and review of mathematical logic, percentage, interest, time-value of money, depreciation, amortization, proration, and estimation of closing statements. In addition, there is an introduction to real estate investments and the basic mathematical skills needed by the successful real estate agent.

### **REAE 1301 Real Estate Principles 3-0-3**

This course meets the Texas Real Estate Licensing Act (TRELA) requirement for real estate core course on real estate principles. The course includes: licensing requirements for a real estate broker and salesperson, ethics of practice, title to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Also includes a minimum of three classroom hours of instruction on federal, state and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment.

### **REAE 1302 Real Estate Marketing 3-0-3**

This course includes a study of real estate professionalism and ethics, characteristics of successful salesmen, time management, psychology of marketing, listing procedures, advertising, negotiating and closing, financing, and the Deceptive Trade Practices-Consumer Protection Act, as amended, and the Business & Commerce Code.

## **REAE 1303 Introduction to Residential Construction**

**3-0-3**

This course is a beginner's orientation to the concepts and terminology of residential construction including one-to-four-family residential units. Topics include site analysis; foundation work; framing, interior and exterior walls; plumbing and electrical work; energy efficiency; roofing; paint and trim work; the role of architects, builders, and real estate brokers in the new home construction business; and other related topics. This course is accepted by the Texas Real Estate Commission as a "related" real estate course for license credit toward both the salesman's and broker's licenses. The course is also apropos for the general consumer public seeking an orientation to new home construction.

## **REAE 1304 Real Estate Law: Agency**

**3-0-3**

This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a real estate core course on the law of agency. The course includes the principle-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 representation procedures, and the disclosure of agency.

## **REAE 2300 Contract Law**

**3-0-3**

This course meets the Texas Real Estate Licensing Act (TRELA) requirement for a real estate core course on contract law. Topics covered include: 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. Instruction also includes the TREC promulgated contract forms, with emphasis on those forms most commonly used.

## **REAE 2301 Real Estate Brokerage**

**3-0-3**

This is an examination of the law of agency; planning and organization; operational policies and procedures; recruiting, selection, and training of personnel; records and control; real estate firm analysis; expansion criteria; the causes of the success and failure of real estate firms; planning for operations; the management of sales activities; maximizing profits through control; meeting competition; and the search for professionalism. Prerequisite: REAE 1301 or consent of the Department Chair.

## **REAE 2302 Residential Real Estate Appraisal**

**3-0-3**

This course is an explanation of the purposes and functions of appraisal; the social and economic determinants of value; appraisal case studies; cost; market data; income approaches to appraisal; final correlations; and reporting. The course also consists of discussions and case studies involving the nature of neighborhood analysis; land or site analysis and valuation; residential styles and utility; mortgage equity and discounted cash flow; and codes of ethics associated with the appraisal industry. Prerequisites: REAE 1301 or consent of the Department Chair.

## **REAE 2303 Real Estate Property Management**

**3-0-3**

This is an explanation of the role of the property manager, landlord policies, operational guidelines; leases; lease negotiations; tenant relations; maintenance; reports; habitability laws; the federal, state, and local Fair Housing Laws; an overview of the real estate market; the rising role of government in real estate; cyclic aspects of real estate; the marketing process in property management; the administrative processes necessary for success; and the operation and management of a property management firm. Prerequisite: REAE 1301 or consent of the Department Chair.

## **REAE 2304 Real Estate Finance**

**3-0-3**

This course is an overview of monetary systems, primary and secondary money markets, sources of mortgage loans, federal government procedures, closing costs, alternative financial instruments, loan application process and procedures, equal credit opportunity, the Community Reinvestment Act, and the Texas Housing Agency purpose and operations. This course also includes the history and background of real estate financing; money and interest rates; notes and mortgages; sources of mortgage money; property appraisal; analyzing borrowers; residential loan analysis; loan analysis of income properties; loan analysis of industrial, rural, and development properties; and settlement procedures. Prerequisite: REAE 1301 or consent of the Department Chair.

## **REAE 2305 Real Estate Law**

**3-0-3**

This course consists of legal concepts of real estate, land description real property rights, estates in land, contracts, encumbrances, foreclosures, recording procedures, evidence of title, an explanation as to how ownership is held, fixture and easements, conveyances, acknowledgments, constructive notice, mortgages, closings, landlord and tenant relationships, regulation of real estate, and real estate taxation.

## **REAE 2306 Real Estate Seminar**

**3-0-3**

This course is a special subjects course that may vary in content with each offering. It is designed to provide a classroom setting to meet the changing needs in real estate education and training. Subjects may range from math, finance, law, contracts, construction, appraisal, property management, taxation, investments, interior decoration, site analysis, blueprint reading, microcomputer applications, and various other subjects. License applicants are instructed to inquire within the Business Administration Department as to whether the Texas Real Estate Commission will accept credits toward license requirements.

## **REAE 2307 Income Property Appraisal**

**3-0-3**

This is an explanation of the purposes and functions of appraisal, the social and economic determinants of value, appraisal case studies, cost, market data, income approaches to appraisal, final correlations, and reporting. The course also consists of discussions and case studies pertaining to building material and equipment, building costs and estimates, accrued depreciation, gross income estimates, analysis of expenses, rates in capitalization, straight and annuity capitalization, and reconciliation of value indications. Prerequisites: REAE 1301, REAE 2302 or consent of the Department Chair.

## **REAE 2308 Real Estate Investments**

**3-0-3**

This course includes an analysis of real estate investment, characteristics, techniques of investment analysis, time-value of money, discounted and non-discounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. In addition, a study of consumer investment alternatives to real estate and the customer/client counseling concerns for real estate investments will be covered. Prerequisites: REAE 1300, REAE 1301, and REAE 2304; or approval of the Department Chair.

## **REAE 2309 Advanced Real Estate Finance**

**3-0-3**

This is an advanced course in real estate finance designed for the licensed real estate salesman or broker, entry-level mortgage loan processor, general contractor, or real estate investor. Subjects include monetary systems, primary and secondary markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity acts, Community Reinvestment Act, and the Texas Housing Agency. In addition, students will receive an extensive amount of "hands-on" training in qualification underwriting guidelines, closing costs, yield analysis, graduated payment mortgages, adjustable rate mortgages, and other variable rate programs. Prerequisites: REAE 2304 and REAE 1300, or equivalent.

## **REAE 2310 Real Estate Law: Contracts II**

**3-0-3**

This course is approved by the Texas Real Estate Commission as a "core" real estate course that can be applied for credit toward both the real estate salesman's and broker's license requirements. Contents include the required excerpts from the Texas Real Estate License Act, as amended, including legal concepts of real estate, land description, real property rights, estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of titles. In addition, there is thorough coverage of the Broker-Lawyer Committee State of Principles and detailed instruction in the actual completion of all promulgated contract forms, with an emphasis on those forms most commonly used. This course is designed to give the real estate student an advanced class on using earnest money contracts in accordance with generally accepted principles of form and salesmanship.

## **REAE 2401 Real Estate Internship I**

**1-18-4**

On-the-job training in the real estate profession that utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student works at an approved work site under the supervision of a College coordinator. Prerequisite: Consent of the Department Chair.

## **(SGER) Small Gas Engine Repair**

### **SGER 1401 Gas Engine Fundamentals 3-3-4**

A study of the fundamental principles and operation of the two- and four-stroke air-cooled engine. Testing and maintenance procedures are performed on the ignition, compression, fuel, starting and lubrication systems of 2-HP and 8-HP engines. Prerequisite or Corequisite: INDU 1400.

### **SGER 1407 Small Gas Engine Service 3-3-4**

This course provides the student with "hands-on" experience in the repair and overhaul of small gas engines. Emphasis will be placed upon valve reconditioning, magneto and ignition repair, carburetor overhaul, crankshaft replacement, and other types of service requirements. Prerequisite: SGER 1401 or consent of the Department Chair.

### **SGER 2311 Shop Organization and Management 3-0-3**

This course is designed to provide the student with an understanding of small engine repair business management. Areas of study include customer relations, warranty provisions, service salesmanship, organization and shop layout, and the financial and operational aspects of managing a small engine repair business. Prerequisite: Sophomore standing or consent of the Department Chair.

### **SGER 2402 Chain Saw Service and Repair 3-3-4**

This course provides the student with the theory and repair skills necessary to service all types of modern chain saws. Areas of study include preventative maintenance, chains, guide bars, sprockets, clutches, fuel, ignition, and lubrication systems. Prerequisite: SGER 1401 and 1407 or consent of the Department Chair.

### **SGER 2408 Outboard Motor Service and Repair 3-3-4**

This course is designed to provide the student with the necessary skills to disassemble, repair, and assemble outboard engines and lower drive units on various types of outboard engines. Special emphasis will be placed on the cooling, ignition, and fuel systems; and the use of special tools, and service manuals. Prerequisite: Sophomore standing or consent of the Department Chair.

### **SGER 2410 Lawn and Garden Equipment Service 2-4-4**

This course is designed to provide the student with "hands-on" experience in the repair of all types of power lawn care units including lawn mowers, riding mowers, garden tractors, tillers, and other similar small engine applications. Skills employed will utilize both oxygas and arc welding equipment when necessary. Prerequisite: SGER 1407, WLDG 1401. Corequisite: WLDG 1402.

### **SGER 2412 Motion Drive Systems 3-3-4**

This course is designed to provide the student with an understanding of the theory and operating principles of motion drive systems used in small gas engine-powered equipment. Emphasis will be placed on inspection, diagnosing, and repair of differentials, transmissions, and transaxles used in these applications. Prerequisite: SGER 1407 and 2410 or consent of the Department Chair.

### **SGER 2413 Large Air-Cooled Engines 3-3-4**

This course is designed to provide the student with an understanding of the theory and operating principles of large air-cooled engines used in lawn mower, RV, and generator applications. Single- and twin-cylinder engines will be included. Emphasis will be placed on inspection, testing, diagnosing, and repair/overhaul procedures. Prerequisite: SGER 1401 and SGER 1407 or consent of the Department Chair.

## **(SOC1) Sociology**

### **SOCI 1301 Introduction to Sociology 3-0-3**

The study of human society, human behavior and personality as a product of group life, community organization, social change and current social problems.

### **SOCI 1306 Contemporary Social Problems 3-0-3**

Identification and analysis of contemporary social problems and development of criteria for evaluating problems for social betterment.

### **SOCI 2301 Marriage and The Family 3-0-3**

A study of problems in courtship, marriage, and family living as they relate to the social structure of American society.

### **SOCI 2319 Race and Ethnicity 3-0-3**

The historical, economic, social, and cultural development of minority groups. May include Afro-American, Mexican American, Asian American, and Native American issues.

### **SOCI 2336 Criminology 3-0-3**

Cases and manifestations of delinquency, case studies of criminals and their social milieu; the offender and agencies of his adjustment; analysis and evaluation of penal methods.

## **(SPAN) Spanish**

### **SPAN 1311 Elementary Spanish I 3-1-3**

Introduction to Spanish with emphasis on conversation, grammar, and vocabulary. May not be transferrable.

### **SPAN 1312 Elementary Spanish II 3-1-3**

Continuation of Spanish conversation, grammar, and vocabulary. Prerequisite: SPAN 1311. May not be transferrable.

### **SPAN 1411 Beginning Spanish I 4-2-4**

The study of Spanish grammar and development of vocabulary. Stresses conversation in Spanish.

### **SPAN 1412 Beginning Spanish II 4-2-4**

A continuation of Beginning Spanish I, with continued emphasis on conversation. Prerequisite: SPAN 1411.

### **SPAN 2311 Intermediate Spanish I 3-0-3**

Continued emphasis on conversation, correct pronunciation, and correct writing. Reading from various Spanish-American authors. Prerequisites: SPAN 1411 and 1412, or two years of Spanish at an accredited high school.

### **SPAN 2312 Intermediate Spanish II 3-0-3**

Continues the readings from Spanish-American authors. Emphasizes grammar, composition, and conversation. Prerequisite: SPAN 2311 or equivalent.

## **(SPCH) Speech**

### **SPCH 1144 Forensic Activities I 1-0-1**

Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

### **SPCH 1145 Forensic Activities II 1-0-1**

Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

**SPCH 1315 Public Speaking 3-0-3**  
Research, composition, organization, and delivery of speeches for various purposes and occasions in a variety of communication situations.

**SPCH 1318 Interpersonal Communications 3-0-3**  
Theory, examples, and participation in exercises to improve effective one-to-one and small group communication.

**SPCH 1321 Business and Professional Speaking 3-0-3**  
Theories and skills of speech communication as applied to business and professional situations. Includes participating in an interview, preparing a resume and cover letter, engaging in problem-solving discussions, and delivering public speeches.

**SPCH 2144 Forensic Activities III 1-0-1**  
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

**SPCH 2145 Forensic Activities IV 1-0-1**  
Study and practices of the nine individual speaking events that are commonly a part of forensic competition. Stresses research of subject matter, performance, and professionalism as a competitive speaker. Will include some travel to area forensic tournaments.

**SPCH 2341 Oral Performance of Literature 3-0-3**  
Study and practice in the principles of oral reading of literature. Stresses analyzing good literature and recreating the logical and emotional content for an audience. Also includes group oral interpretation.

## (TAGA) Tagalog

**TAGA 1401 Beginning Tagalog I 3-3-4**  
This course covers the fundamental skills involved in comprehending, speaking, reading, and writing Tagalog. It also includes basic vocabulary, grammatical structures, and culture.

## (TELE) Television/Radio Telecommunications

**TELE 1301 Introduction to Telecommunications 3-0-3**  
This is a survey course tracing the history of broadcasting and cable from 1884 to the present. Besides history, the course will present information on comparative systems of broadcasting and on the basic operational procedures of radio and television stations, cable facilities, and emerging telecommunications entities.

**TELE 1305 Writing for Broadcasting and Media 3-0-3**  
This course covers the stylistic writing techniques as needed for commercial copy, promotional copy, public service announcements, broadcast news writing, and public relations materials. Students can select projects to complement their career goals.

**TELE 1402 Beginning Radio Production 3-3-4**  
In this course, fundamental techniques and practices of production and programming are emphasized with a great deal of practical experience in radio production facilities. Production of various types of programs including interviews, documentaries, and basic news will be studied. Each student will be trained to competently operate a radio control board, turntables, and tape recorders.

**TELE 1403 Beginning Television Production 3-3-4**  
This course is designed to give the student the fundamental skills in camera operation, microphone techniques, basic set design, basic graphics, and lighting. In addition, each student will participate in the production of live broadcasts from the College owned television station and other live and taped productions. A basic study of the operation of a television station will be covered.

**TELE 1405 Announcing and Performance for Radio and Television 3-3-4**

This course covers the duties and responsibilities of the announcer, such as operation of audio console, announcing commercial copy, announcing station breaks, newscasting, interviewing, etc. Special emphasis is given in the areas of voice and diction and pronunciation. Practical experience will be offered through the use of College-owned radio and television stations.

**TELE 1406 Introduction to Field Production 2-7-4**

This course is designed to introduce the student to the fundamentals of videography with emphasis on television electronic news gathering. Basic picture composition, field lighting and audio techniques will be taught. Students will use professional field cameras and edit group and individual video projects. Laboratory exercises will provide extensive hands-on training in the practical aspects of electronic news gathering videography. Corequisite: TELE 1403.

**TELE 1407 Advanced Audio Production 3-3-4**

Major emphasis in this course is advanced training in the production of radio commercials, promotion announcements, and multi-track training materials using advanced multi-track and tapeless equipment. Each student will be trained to competently operate a multi-track recorder, multi-track console, and non-linear, digital audio editing equipment.

**TELE 1408 Advanced Television Production 3-3-4**

This course offers advanced training in television production. Included will be experience as a camera person, floor director, talent, lighting director, technical director, producer, graphics, video tape operator, and audio engineer. Practical experience in weekly television program production will be available through the use of College-owned television stations. In addition, a critical look will be given to television programming techniques, types of station structure, and innovative technological breakthroughs. Prerequisite: TELE 1403 or consent of the Department Chair.

**TELE 2304 Broadcast Sales 3-0-3**

This course is designed to give the student a working knowledge of broadcast time sales. Areas of study include sales call preparation, sales presentations, spot scheduling, client interviews, collections, rate cards, contracts, and sales promotions. Station ratings and their use in broadcast sales will also be studied. Prerequisite: TELE 1301 or consent of the Department Chair.

**TELE 2306 Telecommunications Seminar 3-0-3**

This seminar is designed to allow the student of broadcasting to take an in-depth look at the industry he will soon serve. Individual investigation will be conducted on the current trends in broadcasting, major issues facing the broadcaster, and the importance of broadcasting in today's society. Considerable discussion on such issues as freedom of the press and the future of broadcasting will take place. This course will give the student an up-to-date and realistic perspective on his chosen industry. Prerequisite: Sophomore standing or consent of the Department Chair.

**TELE 2307 Broadcast Station Management 3-0-3**

This course is an in-depth study of management responsibilities within the broadcast industry. Areas of study include personnel management, station budgets, profit and loss statements, network negotiations, and equipment purchases. Also included is a study of the Federal Communications Commission's rules and regulations pertaining to the overall operation of the broadcast station. Prerequisite: TELE 1301 or consent of the Department Chair.

**TELE 2309 Broadcast and Cable Operations 3-0-3**

This course is designed to provide the student with an understanding and appreciation for the overall operation of radio and television stations and cable companies as businesses. The relationship of the various departments and functions will be covered. Emphasis on how each department contributes to the economic success of the business enterprise. Prerequisite: TELE 1301.

**TELE 2310 Telecommunications Independent Study Project 1-6-3**

The independent study project will provide an advanced student with the opportunity to utilize Telecommunications skills for advanced work in the area of the student's choice. The course will be project oriented and will require the student to submit a formal plan for the project which will require consent of the Department Chair prior to enrollment. The progress of the student will be monitored throughout the semester. The project will require a deliverable program, report or similar product.

**TELE 2311, 2312 Advertising and Promotions I & II 2-4-3**

Advertising and Promotions provides students with an understanding of the field of business and corporate communications. Students will develop scripts for promotional and training audio and video materials. Exercises will include press release production, development of print and video annual reports, product presentations and similar materials. Students will gain skills necessary to monitor contracts for productions accomplished through outside contractors and ad agencies and will learn how to plan and evaluate advertising campaigns.

**TELE 2401, 2402 Technical Aspects of Broadcasting I & II 2-7-4**

These courses will provide students with knowledge and experience in the technical operation of broadcast facilities. Students will be involved in both classroom and laboratory based activities which will provide knowledge of broadcast equipment installation, setup, operation, and maintenance. As a part of the course, students will perform engineering functions in the operation of radio and TV facilities. The two semesters will be structured to ensure a comprehensive and progressive exposure to the appropriate technical topics. Prerequisites: ELTE 1401, TELE 1402, and TELE 1403.

**TELE 2407 Advanced Field Production 3-3-4**

Electronic field production techniques are covered including mini-camera operations, electronic editing principles, remote audio, and lighting techniques. Students assist television station staff with remote production assignments. Prerequisite: TELE 1406 or consent of the Department Chair.

**TELE 2409 Telecommunications Projects 2-7-4**

The telecommunications projects will provide advanced training experience in the area of the student's interest. Each student will develop an individual project or will serve as a responsible member of a group in the development of a major project. This course may be repeated for credit when content changes. Prerequisite: TELE 1402 and 1403 or consent of the Department Chair.

**(TMTH) Technical Mathematics**

**TMTH 1301 Technical Mathematics 3-0-3**

This course includes a study of algebra, trigonometric functions, graphs of trigonometric functions, solution of triangles, and plane and solid geometry. Prerequisite: DSMA 0303 or consent of the Department Chair.

**(TRAN) Transportation**

**TRAN 1301 Introduction to Transportation 3-0-3**

Provides the history and development along with a broad overview of the transportation industry. Includes a basic knowledge of the various modes of transportation (air, motor, rail, water and pipeline), and an introduction to transportation law.

**TRAN 1302 International Trade 3-0-3**

This course considers the relation of foreign trade to domestic trade. It covers the operation of import and export business including organization, marketing, terminology, documents, financial procedures, credits and collection, and communications. The basic principles and practices of world trade are studied.

**TRAN 1303 Economics of Transportation I 3-0-3**

This is a general introduction to the economics of transportation and includes a study of the principles of economics and economic theory applicable to transportation, the principles of marketing and how they relate to transportation, a general survey of government transportation regulation, and a survey of business organizations and their financing.

**TRAN 1304 Interstate Commerce Law & Practice 3-0-3**

This is a general review of the statutory law, leading court decisions, and government regulations and practices. It shows that the effect and purpose of federal regulation of transportation including a review of the respective spheres of federal and state regulations.

**TRAN 2301 Economics of Transportation II 3-0-3**

This is a study of the general services performed by the various types of transportation instrumentalities including organization, operation, and practices. It also presents a review of the economics of freight rates from the viewpoint of the shipper, carrier, and regulatory bodies.

**TRAN 2302 Transportation Law and Regulation 3-0-3**

This course covers the major laws of the United States and state laws which provide for regulation of domestic land and water transportation by for-hire carriers.

**TRAN 2303 Traffic Management I 3-0-3**

This introductory course provides the student with the basic principles of traffic management. The course will cover organization of an industrial traffic department, carrier selection, routing, classification and rating, packaging, and warehousing.

**TRAN 2304 Traffic Management II 3-0-3**

This is a continuation of Traffic Management I. It provides the student with the knowledge and understanding necessary to function as the supervisor or traffic manager of either an industrial traffic department or a for-hire carrier's traffic department. Prerequisite: TRAN 2303.

**TRAN 2307 Highway Transportation 3-0-3**

This is the study of motor carrier rates and practices including instruction in diversified rate problems including both interstate and intrastate tariffs.

**TRAN 2309 Airline Freight Transportation I 3-0-3**

This is an introduction to the airline transportation industry and includes the study of freight by transport aircraft, air express, air freight forwarders as well as the regulation and economics of commercial air transportation.

**TRAN 2310 Airline Freight Transportation II 3-0-3**

A continuation of Airline Freight Transportation I. This is an advanced course in airline freight transportation. Prerequisite: TRAN 2309.

**TRAN 2311 Transportation Marketing 3-0-3**

This course covers the basic sales principles and techniques involved with selling transportation to include personal appearance, communications, development and use of product knowledge, why and how people buy, how to prospect for customers, and how to prepare a presentation.

## (WLDG) Welding

### **WLDG 1324 Introduction to Oxy-Fuel Welding and Cutting (WELD 1301) 2-2-3**

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.

### **WLDG 1328 Introduction to Shielded Metal Arc Welding (SMAW) (WELD 1302) 2-2-3**

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.

### **WLDG 1413 Introduction to Blueprint Reading for Welders (WELD 1406) 3-3-4**

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. Prerequisite: INDU 1400 or consent of the Department Chair.

### **WLDG 1417 Introduction to Layout and Fabrication (WELD 2406) 3-3-4**

A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction. Prerequisite: WLDG 1413 and 2443 or consent of the Department Chair.

### **WLDG 1425 Introduction to Oxy-Fuel Welding and Cutting (WELD 1401) 3-3-4**

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. Prerequisite or Corequisite: INDU 1400 or consent of the Department Chair.

### **WLDG 1428 Introduction to Shielded Metal Arc Welding (SMAW) (WELD 1402) 3-3-4**

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. Prerequisite or Corequisite: WLDG 1425 or consent of the Department Chair.

### **WLDG 1430 Introduction to Gas Metal Arc (MIG) Welding (WELD 2408) 3-3-4**

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. Prerequisite: WLDG 1428 and 2439 or consent of the Department Chair.

### **WLDG 1434 Introduction to Gas Tungsten Arc (TIG) Welding (WELD 2407) 3-3-4**

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. Prerequisite: WLDG 1428 and 2439 or consent of the Department Chair.

### **WLDG 1435 Introduction to Pipe Welding (WELD 2402) 3-3-4**

An introduction to welding of pipe using the shielded metal arc welding process, including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes. Prerequisite: WLDG 1457 or consent of the Department Chair.

### **WLDG 1457 Intermediate Shielded Metal Arc Welding (SMAW) (WELD 1403) 3-3-4**

A study of the production of various fillets and groove welds. Preparation of specimens for testing in all test positions. Prerequisite: WLDG 1428 or consent of the Department Chair.

### **WLDG 2439 Advanced Oxy-Fuel Welding and Cutting (WELD 1405) 3-3-4**

A study of all position welding on ferrous and nonferrous metals using oxy-acetylene welding process including welding and cutting, brazing, and soldering operations. Prerequisite: WLDG 1425 or consent of the Department Chair.

### **WLDG 2443 Advanced Shielded Metal Arc Welding (SMAW) (WELD 2401) 3-3-4**

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. Prerequisite: WLDG 1457 or consent of the Department Chair.

### **WLDG 2453 Advanced Pipe Welding (WELD 2404) 3-3-4**

Advanced topics involving welding of pipe using the shielded metal arc welding process. Topics include electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 5G and 6G using various electrodes. Prerequisite: WLDG 1435 or consent of the Department Chair.

## (WOPO) Word Processing

### **WOPO 1101 MS-DOS: An Introduction 1-0.5-1**

A 24-hour basic introduction to the structure and operation of IBM and IBM compatible microcomputer systems. For professional, managerial, administrative, and clerical personnel who will use but are not familiar with IBM and IBM compatible microcomputer systems. Instruction consists of short lecture/demonstrations and hands-on practice with actual equipment. Topics include IBM microcomputer system components and operating/controlling the system with MS-DOS.

### **WOPO 1102 WordPerfect: An Introduction 1-0.5-1**

A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on experience with minimum lecture. This course includes demonstration, discussion/question/answer sessions. Topics covered include the basic WordPerfect program; document formatting, text entry, spell check, thesaurus, outlining, footnoting, merging letters, document saving, retrieving and editing; WordPerfect directory/files management; printer/font selection and control; and printing documents.

### **WOPO 1103 Microsoft Word: An Introduction 1-0.5-1**

A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on experience with lecture. This course includes demonstration, discussion/question/answer sessions. Topics covered include an overview of word processing; structure of the Microsoft Word program; document formatting, text entry, retrieving, editing and printing document files; directory/files management; merging and printer/font selection and control.

### **WOPO 1104 LOTUS 1-2-3: An Introduction 1-0.5-1**

A 24-hour course introducing participants to the worksheet and graphics capabilities of LOTUS 1-2-3 applications software. For professional, managerial, administrative, or financial analyst personnel with prior microcomputer experience who need budgetary, financial, or other computer database supported information portrayal/analysis capabilities. Instruction consists of short lecture/demonstrations and hands-on practice. Includes discussion/question/answer sessions using practice exercises and examples. Topics include LOTUS operating menus, worksheet design, creation, mathematical functions, protecting, storage, retrieval, moving, copying, editing, data manipulation, graphics development, LOTUS macros, on-line helps, tutorials and references.

**WOPO 1106 Enable: An Introduction 1-1-1**

A 30-hour course for professional, managerial, administrative, and financial analyst personnel having no prior microcomputer experience. A hands-on, minimum lecture approach using actual equipment. Includes discussion/question/answer sessions based upon instructor-furnished practice exercises and examples. Topics include microcomputer system components, operation, and care; integrated software, the ENABLE applications modules; spreadsheet concepts, database management and word processing; graphics; and telecommunications operations.

**WOPO 1107 Spreadsheet Applications 1-0.5-1**

A 24-hour course introducing participants to the worksheet and graphics capabilities of spreadsheet applications software. For professional, managerial, administrative, or financial analyst personnel with prior microcomputer experience who need budgetary, financial, or other computer database supported information portrayal/analysis capabilities. Instruction consists of short lecture/demonstrations and hands-on practice. Includes discussion/question/answer sessions using practice exercises and examples. Topics include spreadsheet operating menus, worksheet design, creation, mathematical functions, protecting, storage, retrieval, moving, copying editing, data manipulation, graphics development, spreadsheet macros, on-line help features, tutorials and references.

**WOPO 1108 Word Processing Applications 1-0.5-1**

A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on experience with minimum lecture; includes demonstration, discussion/question/answer sessions. Topics include: overview of word processing structure of word processing program; defining files; document formatting, text entry, retrieving, and editing and printing documents files; directory/files management; merging and printer/font selection and control.

**WOPO 1109 Database Applications 1-0.5-1**

A 24-hour course introducing participants to the capabilities of a database structure. Hands-on with minimum lecture; includes demonstration, discussion/question/answer sessions. Topics include how to create, edit, browse, sort, search, and delete entries within a database structure. In addition, participants will learn how to modify an existing structure, create a report, and how to change or replace fields using search criteria.

**WOPO 1303 Beginning Keyboarding/Data Entry 2-4-3**

A beginning course in the fundamentals and techniques of keyboarding and data entry on personal computers. Special emphasis on speed development, including an introduction to letter writing, tabulating, and preparing manuscripts.

**WOPO 1304 Intermediate Information Processing Applications 2-4-3**

A continuation of WOPO 1303. Additional skills in terms of accuracy and speed will be evidenced by students in utilizing personal computers. Composition and typing of business letters, tabulations and manuscripts of more demanding content will be instructed. Prerequisite: WOPO 1303 or consent of the Department Chair.

**WOPO 1305 Applicational Software 2-4-3**

A course for professional, managerial, administrative, and financial analyst personnel having no prior microcomputer experience. A hands-on lecture/lab approach using actual equipment. Includes discussion/question/answer sessions based upon instructor-furnished practice exercises and examples. Topics include microcomputer system components, operating/controlling the system with MS-DOS; spreadsheet operating menus, worksheet design and creation, mathematical functions, graphics development, spreadsheet macros, and data manipulation; overview of the word processing program's structure, defining files, document formatting, text entry, retrieving, editing and printing document files, merging, printer control, and font selection.

**WOPO 1307 Word Processing/Transcription 2-4-3**

This course is designed to train students in the theory of word processing. It introduces the student to word processing facilities and equipment. It also provides hands-on experience with word processing equipment to include processing, editing, storing information, printing devices, formatting, type style, and paragraphing. Transcribing machines are utilized in conjunction with information creation. Suggested typing skills of 35 WPM. No timed writings are required.

**WOPO 2302 Advanced Information Processing Applications 2-4-3**

This course includes advanced work in such specialized production as desk top publishing and computer graphics. Personal computers and applicable software are used extensively in preparing students to be highly productive office employees. Prerequisites: WOPO 1304 or equivalent.

**WOPO 2303 Office Automation 2-4-3**

The students will work with advanced problems utilizing hands-on experience with information processing facilities and equipment. Hands-on experience includes the following: editing, storing, printing, formatting, computing and networking. A thorough study of present and future systems, i.e., interchangeability and adaptability of software. Prerequisite: 6 WOPO hours or equivalent.

**WOPO 2304 Automated Accounting 2-4-3**

Review of principles of accounting, such as journalization, posting, statements, special journals; subsidiary ledgers will be studied utilizing software packages. Special emphasis is placed on personal, family and small business accounting systems. Prerequisite: OADM 2304 or equivalent.

**WOPO 2306 Information Systems & Applications 2-4-3**

This course is designed to give secretarial, clerical, management, and word processing students insight into the present and future office environment with regard to the current trend towards automation. Through class discussion, individual and/or group projects, research and input from various speakers from related areas of private industry, students will become aware of the impact of current trends toward automation in the office as well as related business fields. Prerequisite: 12 WOPO hours or equivalent.

**WOPO 2310 Word Processing Center Management 3-0-3**

This course covers the factors that influence work efficiency and human behavior in the information processing center environment. This course includes a consideration of systems limitations and capabilities, work flow, system security, scheduling, managerial theories, system evaluation, human relations, and supervision. Prerequisite: Sophomore standing or the consent of the Department Chair.

# **ersonnel**

## **Deans**

Lois A. Anderson, Dean, Continental Campus  
Don L. Martin, Dean, Pacific Far East Campus  
Fred J. Ostertag, Dean, Europe Campus  
John E. Pierson, Dean, NAS Millington, Tennessee  
Jim M. Yeonopolus, Assistant Deputy Chancellor, Campus Operations/Dean Navy Campus

## **Staff**

Maureen Abel, Area Director, Hawaii  
Milton W. Alexander, Associate Dean/ATC Maint-NAS Pensacola, Florida  
William J. Attan, Students Services Officer, Pacific Far East Campus  
John Attansio, Director, Student Services, Pacific Far East Campus  
Ken Austin, College Program Coordinator, Navy Atlantic  
Laurel Baumberger, Coordinator, U.S. Embassies  
John F. Baumgardner, Administrative Services Officer, Navy Atlantic  
Marcial P. Bautista, Student Services Officer, Navy Pacific  
Sherry Bays, PACE Coordinator (Navy Pacific)  
Jennifer Beatty, Site Coordinator, Groton, Connecticut (Navy Atlantic)  
Nancy Bergstrom, Site Director, Camp Pendleton, California  
Vernon R. Bowen, Administrative Officer, NAS Pensacola, Florida  
Violeta C. Briody, Site Coordinator, Norfolk, Virginia (Navy Atlantic)  
Terrilyn M. Cisneros, Student Services Officer, Navy Atlantic  
Colvin Davis, Regional Director, Mainland Japan, Pacific Far East Campus  
Brian J. Duffy, Regional Student Services Officer, Pacific Far East Campus  
Richard Gates, Site Director, Fort Lee, Virginia  
Don Giddens, Area Director, Fort Stewart, Georgia  
Tom Graham, Site Coordinator, Fort Sill, Oklahoma  
Barbara A. Grice, Site Coordinator, MOU Programs, San Diego, California  
Alethea Hamilton, Site Director, Bolling Air Force Base, Washington, D.C.  
Peter Hershfield, Area Director, Panama/Honduras  
Paul Illian, Site Director, Fort Riley, Kansas  
Kevin Kelly, Site Director, Fort Greely, Alaska  
Neal Kepler, Regional Director, Okinawa & Diego Garcia, Pacific Far East Campus  
Gary Kindred, Associate Dean, Continental Campus  
Elizabeth A. Lane, Site Coordinator, Newport, Rhode Island (Navy Atlantic)  
Clara H. Maher, Director, Human Resource and Automation Services, Europe Campus  
Peter M. Maloney, Associate Dean, Navy Atlantic Programs  
Oliver Miller, Site Director, Fort Buchanan, Puerto Rico  
Valerie Mundt, Site Director, Fort Wainwright  
Jan E. Murawsky, Area Coordinator, Pope Air Force Base/Fort Bragg, North Carolina

Edmond R. Murphy, Associate Dean/Avionics-NAS Pensacola, Florida  
 Niccole Neal, Coordinator, Air Force Reserve Programs  
 Hal Nolan, Director, Military Training Program  
 Rose M. Nolan, Site Coordinator/Instructor, Japan (Navy Pacific)  
 Teodoro Orendain, Business Manager, Pacific Far East Campus  
 Luis R. Ortiz, Site Coordinator, Honduras  
 Marguerite C. Park, Manager, Payroll/Personnel, Pacific Far East Campus  
 Santina Poor, Director of Test/Eval-Ashore Coordinator, Navy Pacific  
 Irene W. Preiss, Site Coordinator/Instructor, Bremerton, Washington (Navy Pacific)  
 Louis R. Pylant, Program Manager, Alaska Education Services  
 Margaret Pylant, Site Director, Fort Richardson, Alaska  
 Bernard A. Ray, Site Coordinator, Charleston, South Carolina (Navy Atlantic)  
 Manfred G. Resch, Regional Director, Republic of Korea, Pacific Far East Campus  
 John Rice, Manager, Support/Auxiliary Services, Pacific Far East Campus  
 Daniel Sadowitz, Director, Instructional and Library Services, Pacific Far East Campus  
 Elaine Singley, Site Director, Holloman Air Force Base  
 Charles E. Spurlock, Site Coordinator, Mayport, Florida (Navy Atlantic)  
 Lynn A. Stivison, Administrative Services Officer, Navy Pacific  
 Ron D. Stone, Site Director, Fort Leonard Wood, Missouri  
 Robert B. Taylor, Program Coordinator, Navy Atlantic  
 William E. Taylor, Associate Dean, Instructional Programs  
 Neil Teske, Site Director, Fort Polk, Louisiana  
 Ulla Torres, Site Director, Fort Lewis, Washington  
 Ilse Wakley, Coordinator, Navy Campuses  
 Robert G. Wahl, Director, Administrative Services, Pacific Far East Campus  
 Joan M. Waldrop, Site Director, Fort Knox, Kentucky  
 Robert R. White, Site Coordinator, Naples, Italy (Navy Atlantic)  
 Dale H. Wilson, Associate Dean, Student and Administrative Services, Europe Campus  
 Kenneth P. Woodward, Associate Dean, Navy Pacific Programs

## **System Student Support Staff - Central Campus**

Betty Broadhurst, Director, Evaluation Services  
 Bob Criswell, Dean, Student Services  
 Lillian Kroeger, System Registrar  
 Noel H. Schnitz, Dean, Library Services  
 Annabelle L. Smith, Director, Offices of Student Aid

# Faculty

## Continental Campus

Marv Abrahams  
Government  
B.A., San Diego State University  
M.A., San Diego State University

Tiwanda Allen (1994)  
Mathematics  
B.S., North Carolina State University  
M.S., North Carolina State University

Siamak Araghi (1987)  
Management  
B.S., Institute of Advance Accounting  
M.B.A., Marshall University  
Ph.D., Newport University

John F. Bash (1994)  
History/Philosophy/Management  
B.B.A., University of Texas at El Paso  
M.B.A., University of Texas at El Paso  
M.A., St. Mary's Seminary and University  
S.S.L., St. Ignatius of Antioch School of Theology  
Ph.D., Greenwich University

William Begg (1991)  
Criminal Justice  
B.S., Fordham College  
M.A., Webster University

Mark Bergman  
Criminal Justice  
A.A.S., Central Texas College  
B.S., Fayetteville State University  
M.B.A., Webster University

Marcia Black (1995)  
Mathematics  
B.S., Howard University  
M.S., University of Illinois at Urbana-Champaign

Laurence R. Carver III  
History  
M.S., Kansas State University

Linda Chambers (1994)  
Computer Science  
B.A., Bluefield State  
M.A., Strayer College

Arlena Chaney (1995)  
Communications/Speech  
B.A., Federal City College  
M.A., Howard University  
Ph.D., Howard University

Warren Chellman (1994)  
Mathematics  
B.S., United States Military Academy  
M.S., Naval Post Graduate School

Paul W. Collins  
Sociology/Psychology  
B.S., Northern Michigan University  
M.A., Northern Michigan University

Mary E. Cooney (1996)  
English  
B.A., Mount Mary College  
M.A.T., University of Louisville

Charles Constantin  
History  
B.A., Yale  
M.A., Yale  
Ph.D., University of California, Berkeley

John K. Costello (1996)  
Law Enforcement  
B.S., King's College  
M.B.A., Xavier University  
NRA Certified Instructor/Range Officer

Michael Cox  
Psychology  
B.S., Eastern New Mexico University  
M.A., New Mexico Highlands University  
Ed.S. (Masters), Eastern New Mexico University  
Ph.D., United States International University

Wayne Davidson  
Business Management  
M.B.A., Western International University

Vicki Davis (1989)  
English  
A.B., Randolph-Macon Women's College  
M.A., Virginia State University  
Post Graduate Studies, Virginia State University

- Larry French Diehl (1996)  
Law Enforcement  
B.A., Columbia College  
M.A., Webster University
- Michael S. Dresden (1986)  
Automotive Maintenance  
A.A.S., Central Texas College
- James A. Dula (1989)  
English/Speech  
B.A., Upper Iowa University  
M.A., University of Oklahoma
- Edward H. Eisner, Jr. (1986)  
Management  
B.A., Saint Leo College
- Frank Elliot  
Small Gas Engine  
A.A.S., Central Texas College
- Moiria Fescina (1990)  
Mathematics/Management  
B.A., Lady Cliff College  
M.B.A., Campbell University
- Sharon G. Fischer  
History  
B.S., University of North Dakota  
M.S., Troy State University
- Linda A. Flynn (1992)  
Social Science  
B.A., Russell Sage College  
M.A., University of New York
- Douglas E. Freed (1987)  
Management  
A.A.S., Central Texas College  
B.S., Urbana University  
M.S.A., Central Michigan University  
Doctoral Work in progress, Nova University
- Ronald L. Geisheimer  
Speech  
B.A., Northeastern Illinois University  
M.A., Northeastern Illinois University
- Dennis Geisler (1984)  
Social Science/History  
B.S., Missouri State University  
M.S., Missouri State University  
M.A., Missouri State University
- Robert G. Geisler (1990)  
Automotive Technology  
A.A.S., Central Texas College
- Richard Gilbert  
English  
M.A., Trinity University  
M.S., Long Island University
- Beth E. Gillmer-Jones (1989)  
Law Enforcement  
B.S., Dr. Martin Luther College
- Frank B. Gray, Jr.  
Mathematics  
B.S., Ohio State University  
M.S., Ohio State University  
Ph.D., New Mexico State University
- James J. Grimm (1983)  
Management  
B.S., University of Connecticut  
M.S., University of Southern California  
M.S., Kansas State University
- Sam C. Grizzle (1991)  
Social Science/Government  
B.S., Troy State University  
M.S., Troy State University
- Michael L. Gross, Chief, Voc/Tech (1985)  
Automotive Technology  
B.S., Fort Hays State University  
M.S., Kansas State University
- Kenneth P. Grosselin, C.P.A. (1992)  
Management/Accounting  
B.S., West Virginia University  
B.O.M., University of La Verne
- Lynn J. Hancsak (1989)  
Science/Earth Science  
B.S., Eastern Tennessee State University  
M.S., University of Toledo
- William D. Hayes, Jr. (1993)  
International Relations/Government  
B.A., University of South Carolina  
M.S., Campbell University
- David Hentzel  
Economics  
Ph.D., Southern Illinois University

Javier Hernandez  
Spanish  
B.A., San Diego State University  
M.A., San Diego State University

Henry H. Horton (1989)  
Law Enforcement  
B.S., Eastern Tennessee State University  
M.S., George Washington University

Susan Horton (1994)  
Government  
B.S., Pennsylvania State University  
M.A., University of California at Santa Barbara  
Ph.D. (ABD), University of Maryland, College Park

John Isakson  
Business  
M.A., National University  
M.B.A., National University

Leroy James (1996)  
Law Enforcement  
A.A., Community College of the Air Force  
B.S., University of Maryland  
M.S., Johns Hopkins University

Dennis Jana  
History  
B.A., DePaul University  
M.A., University of San Diego

Zabe Jenkins (1993)  
Computer Science  
A.A.S., Community College of the Air Force  
B.S., University of Maryland  
M.B.A., Averett College

L. Stephen Jennings (1992)  
Law Enforcement  
A.A., Ferrum College  
B.A., Hiram Scott College  
Masters degree work in progress, University of Pittsburgh

Linda Johnson-Semple (1994)  
Computer Science  
B.A., Bluefield State  
M.A., Strayer College

Carrie Jones (1995)  
Mathematics  
B.S., University of South Carolina  
M.S., University of South Carolina

Michael Jones  
Psychology  
B.A., McKendree College  
M.S., Bangor University

Kevin C. Kelly  
Government  
B.S., University of Kentucky  
M.S., Troy State University

Robert Lemon (1981)  
Management  
M.A., Webster University

Steven Lerner  
Computer Science  
B.A., National University

Kimberly A. Lovalenko  
Sociology  
B.S., Walla Walla College  
M.S., Walla Walla College

Javors Lucas, Jr. (1994)  
B.S., Tuskegee Institute  
M.S., Bowie State University  
U.S. Command and General Staff College

Harold D. Macumber (1987)  
Psychology/Sociology/Management  
B.A., Henderson State College  
M.A., Webster University

Farrell D. Maichel (1985)  
Management  
B.S., Kansas State University  
M.S.B.A., University of Northern Colorado

Jeannie Martin (1996)  
Law Enforcement  
B.A., NOVA & George Washington University  
M.A., Virginia Tech

Susan McCormack  
English  
B.A., Long Beach State College  
M.A., California State College, Long Beach

Scott McHugh (1996)  
Law Enforcement  
B.A., University of Pittsburgh  
M.A., U.S. Defense Intelligence College  
M.A./Ph.D. , in progress, George Washington

Bruce McKain (1992)  
Government  
B.S., Brenau University  
M.Ed., Boston University  
M.A.T., University of Louisville

Richard A. McKinley (1985)  
Hospitality Management/Culinary Arts  
A.A.S., Central Texas College  
B.A., Saint Leo College  
M.Ed., Virginia State University  
Certificate of Advanced Study, Virginia University

Leonard Meyer  
Mathematics/Computer Science  
B.S., University of Missouri  
M.S., University of Missouri  
Ed.D., University of Missouri

Steven B. Michael (1987)  
Social Science/History  
B.A., Mount Vernon Nazarene College  
M.A., Ohio State University  
Ph.D., Ohio State University

Peggy A. Miles (1987)  
Early Childhood Professions  
B.A., Western Michigan University  
M.A., Western Michigan University

Leonard R. Miller  
Management  
B.S., University of Missouri  
M.S., University of Missouri  
Ed.D., University of Missouri

Walter Molyneux  
Automotive Technology  
B.S., Southern Illinois University  
A.S.E., Certification, Master Mechanic

John Moran (1994)  
Law Enforcement  
A.A., University of Maryland  
B.S., University of Maryland  
M.S., Johns Hopkins University

Robert E. Mullin  
English  
A.A., Kansas City Junior College  
B.S.E., Emporia State Teachers College  
M.A., Emporia State Teachers College

Angela Neal (1991)  
Computer Science  
B.S., Mississippi State University  
M.A., Webster University

Chris Nelson (1994)  
Automotive Repair  
A.A.S., Central Texas College  
A.S.E., Master Tech, Automotive

Joseph Nolan  
Economics  
B.S., U.S. Naval Academy  
M.S., Naval Postgraduate School

Nathaniel Owens (1987)  
Philosophy  
B.A., Miles College  
M.A., Interdenominational Center Theological Center  
Ph.D., Chicago Theological Seminary

Hope P. Patterson  
English  
B.A., North Georgia College  
M.S., Michigan State University

Charles L. Perry (1987)  
Management  
B.A., Mercer University  
M.A., Georgia College

David P. Phalen (1991)  
English  
B.A., Iowa State  
M.A., University of Mississippi

James A. Phelps (1987)  
Mathematics  
B.A., North Dakota State University  
M.S., Auburn University of Montgomery  
M.B.A., Creighton University

Mark Pleis (1994)  
Automotive Repair  
A.A.S., Central Texas College  
A.S.E., Master Tech, Automotive

John Prevar (1995)  
Communications (English)  
B.A., University of Maryland  
M.A., Duke University  
Naval War College

Roy M. Radcliffe (1997)  
Mathematics  
B.S., U.S. Naval Academy  
M.S., Naval Post Graduate School

D.J. Reck, Chief, Technical Services  
Automotive Technology  
A.A.S., Central Texas College  
A.S.E., Master Tech, Automotive

John T. Richards  
English  
Ph.D., University of Missouri

Joseph Sawaya  
Mathematics  
A.A., St. Bernard College  
B.A., University of Southern California  
Ph.D., United States International University

Richard A. (Pete) Sellers Coordinator  
Office Administration  
M.S., George Washington University

Ronald N. Semarge (1985)  
Management/Microcomputer  
A.A., New Mexico State University  
B.A., Park College  
M.B.A., Kansas State University

Glenn Schwaiger  
Fine Arts  
B.F.A., University of Illinois  
M.F.A., New Mexico State University

Kerry Scott (1994)  
Law Enforcement  
B.A., University of Albuquerque

Baxter J. Sessums (1991)  
Accounting  
B.S., University of Richmond  
M.A., University of Richmond

Michael Shafer (1994)  
Social Science  
B.S., Park College  
M.S., Texas Tech University

Henry G. Sharber III (1991)  
Communications  
B.S., Randolph-Macon College  
M.S., Virginia Commonwealth University

Samuel R. Shumaker (1987)  
Communications/English  
B.A., Duke University  
M.A., Vanderbilt University  
Ed.S., George Washington University  
U.S. Command and General Staff College

Ira Singer  
Government/History  
M.A., Ohio State University

Curtis Smith (1993)  
Computer Science  
A.S., Community College of the Air Force  
B.A., Duke University  
M.A., Vanderbilt University  
Ed.S., George Washington University

George E. Smith (1988)  
Air Conditioning  
A.A., El Paso Community College

James Speed (1990)  
English  
B.S., Jackson State University  
M.A., Jackson State University

Joyce Starks (1994)  
Computer Science  
B.S., Southern University

Kristen Stonebreaker  
Speech  
B.A., San Diego State University  
M.A., San Diego State University  
Ph.D., University of San Diego

Lori Strader  
History  
B.S., Abilene Christian University  
M.A., Abilene Christian University

David Taylor  
Computer Science  
A.A., University of Maryland, University College  
A.A.S., Community College of the Air Force  
B.S., University of Maryland, University College

Ralph Tohomias  
Law Enforcement  
A.A.S., Northern Virginia Community College  
B.S., Eastern Kentucky University  
M.S., Eastern Kentucky University

Vincent Velotte (1994)  
Law Enforcement  
A.A.S., St. John's University

William P. Wadbrook (1997)  
Economics  
B.S., Georgetown University  
M.A., Fletcher (Tufts) Harvard  
Ph.D., Fletcher (Tufts) Harvard

Helen D. Wells (1989)  
Communications/Speech  
B.A., Howard University  
M.A., Howard University  
Ed.D., George Washington University

Geni Wetling  
Early Childhood Professions  
M.S., Mercer University

Clifford E. White (1989)  
Law Enforcement  
B.S., Wichita State University

Nathanial Wilson (1986)  
Management  
B.A., University of Alaska  
M.A., Central Michigan University

Craig Wookfolk (1988)  
Mathematics  
B.S., SUNY-Brockport  
M.A., SUNY-Brockport

Rex E. Young, Jr.  
B.S., Wayland Baptist University  
M.S., University of La Verne

Robert Young  
English  
B.A., University of Oklahoma  
M.A., Central State University, Oklahoma  
Ph.D., Idaho State University

## Europe Campus

Tracy Allred (1996)  
Legal Assistance  
B.A., Brigham Young University  
B.S., University of Utah  
J.D., University of the Pacific

Will Anderson (1981)  
Automotive Technology  
A.A.S., Central Texas College

Susan Barkman (1994)  
Early Childhood Professions  
B.S., East Texas State University

Richard Basile (1981)  
Law Enforcement/Military Science  
A.A.S., Central Texas College  
A.A., University of Maryland

Joseph Brasch (1984)  
Law Enforcement/Military Science/Legal Assistant  
A.S., Allan Hancock College  
B.A., Ventura College of Law  
B.A., Columbia Union College  
M.Ed., National Louis University

Bernard Cantin (1994)  
Hospitality Management/Culinary Arts  
A.A., Central Texas College

Robert Chevalier (1996)  
Communications Electronics Technology  
A.S., Oklahoma Junior College

Theresa Cramer (1991)  
Law Enforcement  
A.S., Portland Community College  
B.A., Southern Oregon State University  
M.A., Antioch University

Albert Decambra (1994)  
Law Enforcement/Military Science  
B.S., Wichita State University

Denise Distefano (1992)  
Legal Assistant/Law Enforcement  
B.A., American University  
J.D., American University

John Emmering (1992)  
Law Enforcement  
A.A.S., College of DuPage  
B.S., Western Illinois University  
B.A., Hyles-Anderson College  
M.A., Liberty University

Ken Foss (1990)  
Law Enforcement  
A.S., San Francisco City College  
B.A., University of California  
M.P.A., Golden Gate University

David Garey (1996)  
Law Enforcement/Military Science  
A.A., Central Texas College  
B.S., University of Maryland

Felipe Gonzalez (1993)  
Emergency Medical Technology  
B.A., Claremon Men's College  
M.D., University of California, Los Angeles

Joel R. Gonzalez (1994)  
Legal Assistant/Law Enforcement  
B.A., St. Mary's University  
J.D., Notre Dame Law School

Dorothy Greshem (1994)  
Emergency Medical Technology  
B.S.N., Creighton University

Peter Griffiths (1993)  
Law Enforcement/Military Science  
B.A., University of Akron  
M.A., University of Chicago  
M.S.W., University of Michigan

Rosalind Hairston (1989)  
Law Enforcement  
B.S., Troy State University  
M.S., Troy State University

Harlan E. Hendy (1997)  
Hospitality Management/Culinary Arts  
A.A., Central Texas College

Charles Hills (1989)  
Office Administration/Legal Assistant/Military Science  
B.A., University of Maryland  
M.S., Boston University

Richard Holman (1994)  
Law Enforcement/Legal Assistant/Military Science  
A.A.S., North Idaho Junior College  
B.S., University of Idaho  
M.P.A., University of Idaho

Donna Humphrey (1993)  
Legal Assistant/Law Enforcement  
A.A., McCormac Junior College  
B.S., Arizona State University

John Jenkins (1993)  
Law Enforcement  
B.A., University of Nebraska

David L. Jensen (1988)  
Law Enforcement  
A.G.S., Central Texas College

Grady Kelly (1994)  
Law Enforcement  
B.S., Auburn University  
M.S., Troy State University  
M.Ed., Troy State University

Nathaniel Laws (1975)  
Automotive Technology  
A.A.S., Central Texas College

Alexander Lopez (1987)  
Law Enforcement  
A.A.S., Central Texas College  
B.S., Cameron University

George Ludwig (1994)  
Communication Electronics Technology  
A.A., University of Maryland

John Martensen (1996)  
Legal Assistant/Law Enforcement  
B.A., Arkansas University  
M.S., Arkansas University  
J.D., Arkansas University

Barbara Martin (1992)  
Early Childhood Professions  
A.A., Wingate College  
B.A., Atlantic Christian University  
M.S., Nova University

Samuel Mosteller (1995)  
Law Enforcement/Military Science  
B.A., West Georgia College  
M.S., Central Michigan University

George Mulligan (1988)  
Law Enforcement/Military Science/EMT  
B.A., Western Kentucky University  
M.Ed., Boston University

Mark Nash (1996)  
Law Enforcement  
A.A., University of Maryland  
B.S., Upper Iowa University

Alan Noah (1987)  
Law Enforcement  
A.A., City College of San Diego  
B.A., Chapman College  
M.A., Chapman College  
Ed.D., United States International University

Nancy Oesterle (1989)  
Hospitality Management/Culinary Arts  
A.G.S., Central Texas College

Michael Payne (1992)  
Communications Electronics Technology/  
Office Administration  
B.A., University of Maryland

Mark Personeus (1994)  
Law Enforcement/Legal Assistant  
B.A., University of California-Los Angeles  
M.A., University of Southern California  
J.D., University of California

Cheryl Plonka (1995)  
Early Childhood Professions  
B.S., Lyndon State College  
M.A., University of Colorado

Leslie Pozanek (1990)  
Law Enforcement  
B.A., University of Maryland  
M.P.A., University of Baltimore

Guy Rhoads (1990)  
Automotive Technology  
A.A.S., Central Texas College

Tyrone Robinson (1991)  
Law Enforcement/Military Science  
A.S., Park College  
B.S., Park College  
M.Ed., National-Louis University

Benjamin Russ (1991)  
Military Science  
B.S., University of Maryland

Donald T. Sanders (1993)  
Transportation/Office Administration  
B.S., University of Maryland

Chris Saucedo (1996)  
Law Enforcement  
A.A., New Mexico State University  
B.S., University of Maryland  
M.A., University of Oklahoma

Marie Schaechter (1994)  
Emergency Medical Technology  
B.S.N., McGill University  
R.N., Boston City Hospital

Glenn Shaver (1990)  
Automotive  
A.A.S., Northern Virginia Community College  
B.S., University of Maryland

Wayne Skidmore (1993)  
Office Administration  
B.A., Portland State University  
M.Ed., Boston University

Michael South (1996)  
Law Enforcement  
A.A.S., Central Texas College

William Steele (1986)  
Automotive Technology  
A.A., Central Texas College

Maggie Taylor (1994)  
Early Childhood Professions  
A.A., West Los Angeles College  
B.S., University of New York-Regents

Robert J. Toothman (1993)  
Communications Electronics Technology/Military Science  
B.S.E.E., University of Missouri  
M.S.E.E., Air Force Institute of Technology

Lynn Torres (1995)  
Early Childhood Professions  
B.A., San Joaquin Delta College

Stephen Waller (1982)  
Hospitality Management/Culinary Arts  
A.A.S., Central Texas College

Brian D. Williams (1987)  
Automotive Technology  
A.A., University of Maryland  
A.A.S., Central Texas College

Brenda Wolff (1994)  
Legal Assistant  
A.A., Kent State University  
B.B.A., Cleveland State University  
J.D., Cleveland State University

## **Navy Campus**

Ashley I. Abrahmson (1988)  
Government/Business/Management  
B.A., Miami University (Ohio)  
M.A., University of Florida  
M.B.A., Columbia University  
A.B.D./M. Phil., Columbia University

Robert Aldrich (1988)  
Philosophy  
B.A., Heidelberg University  
M.Div., Union Theological Seminary  
M.Ed., University of San Diego

Lloryel (Bill) Antoine (1990)  
Psychology  
B.S.Ed., Southeast Missouri State College  
M.S. Ed., University of Kansas  
Ed.S., University of Florida  
Ed.D., Northern Illinois University

Jeffrey S. Barnes (1996)  
English  
B.A., State University of New York  
M.A.T., University of South Carolina

Barnard Barufaldi (1988)  
History/Government  
B.S., Holy Cross College  
M.A., Vanderbilt University  
M.A.T., University of Massachusetts

Donald Beck (1993)  
Business/Management  
B.S.E.E., Naval Post Graduate School  
M.S.B.O.M., Laverne University

Richard Bell (1991)  
History/Government/Law Enforcement  
B.G.S., Chaminade University  
M.A., Tarleton State University

Ronald Bohuslov (1992)  
Mathematics  
A.A., Fullerton Junior College  
B.A., University of California  
M.A., University of California  
Ed.D., NOVA University

David Bradford (1992)  
Economics/Management/Business  
B.A., Kenyon College  
M.B.A., University of Chicago

Harry W. Brantly (1990)  
Psychology/Sociology/Criminal Justice  
M.A., Rollins College  
M.S., Rollins College

Dan Branscum (1993)  
Management/Philosophy/Psychology  
B.A., Northern Arizona University  
M.A., Salve Regina University  
M.A., National University  
M.Div., Southwest Baptist Theological Seminary

Gilbert E. Bullock (1990)  
Geology/Psychology  
B.A., University of Wyoming  
M.Ed., University of Wyoming

James E. Bush (1987)  
Business/Management  
M.B.A., University of South Carolina

Duncan Campbell (1994)  
English/History  
B.S., Regents College, University of the State of New York  
B.A., Old Dominion University  
M.A., Old Dominion University

William J. Capps (1987)  
Law Enforcement/Management/Psychology  
A.S., San Diego City College  
B.S., Laverne College  
M.A., Laverne College  
M.S., Laverne College

James D. Car (1992)  
Sociology  
B.S., Arizona State College  
M.A., San Francisco State College

Robert Chase (1989)  
English  
B.A., Pepperdine University  
M.A., University of Southern California

Ervin Cooper (1990)  
Management  
B.A., University of Missouri  
M.A., San Diego State University

Weldon Cox (1990)  
History  
B.S.Ed., University of Missouri  
M.Ed., University of Missouri

Samuel A. Davis (1993)  
History/Government  
B.S., East Carolina University  
M.A., East Carolina University  
M.L.S., East Carolina University

John Doran (1988)  
English/Speech  
B.A., Rockhurst College  
M.A., University of Notre Dame  
Ph.D., University of California, Los Angeles

Falorante Dulay (1993)  
Psychology  
B.A., San Diego State University  
M.S., San Diego State University

Charles Fillercup (1988)  
Computer Science/Mathematics  
B.Eng., University of Southern California  
M.S., University of Southern California  
Ph.D., University of Southern California

Billy Finch (1989)  
Mathematics  
B.A., University of Florida  
M.A.T., University of Florida

David Fisher (1991)  
History  
B.A., Baylor University  
M.A., Southwest Texas State University

Catherine Fitzmaurice (1991)  
English  
B.A., University of California  
M.A., University of California

Frank R. Fitzpatrick (1989)  
Business/Management  
B.S., Roosevelt University  
M.S., University of Wisconsin

Joseph A. Frangie (1989)  
Government/Spanish/Law Enforcement/Criminal Justice  
B.A., New York University  
LL.B., LaSalle Extension University  
J.D., Inter American University of Puerto Rico

Thomas E. Franklin (1988)  
History  
M.S., Northeast Louisiana University

Bernard L. Freese (1987)  
Computer Science/Business/Management/Mathematics  
M.S., University of North Dakota  
M.B.A., University of South Dakota

Charles S. Fulcher (1989)  
Science  
B.S., Virginia Polytech Institute  
M.Ed., University of North Carolina

David H. Garrett (1995)  
History  
B.A., West Virginia University  
M.A., University of Richmond

Dana E. Gassaway (1994)  
History/Philosophy  
B.S., University of North Alabama  
M.A., Southeastern Baptist Theological Seminary

Thomas A. Gentilella (1987)  
English  
B.A., University of San Diego  
M.A., Loyola University

Michale Gibbons (1992)  
Law Enforcement  
A.A., Hartnell College

Thomas D. Greenhaw (1989)  
History  
B.A., Defiance College  
M.A., Stetson University  
Ph.D., Auburn University

Michael Gregg (1988)  
Mathematics  
B.S., Michigan State University  
M.A., University of Michigan

James A. Harrison (1987)  
English  
M.A., San Jose State University

Lawrence S. Hartsfield (1987)  
Business/Management/Accounting  
B.S., Stetson University  
M.B.A., University of North Florida

Jeffrey C. Hewitt (1993)  
Management  
B.A., Hamilton College  
M.A., Colgate University

Mark Hickerson (1993)  
Government/History  
A.A., Mt. San Antonio College  
B.A., California State University, Fullerton  
M.A., California State University, Fullerton

Michael Hill (1987)  
English  
B.A. Southern Oregon College  
M.A., University of Arizona, Tucson

Aubrey M. House (1995)  
Business/Management/Psychology  
B.S., University of North Texas  
M.A., Texas Tech University  
Ph.D., Texas Tech University

David M. Hughes (1988)  
History  
B.A., High Point College  
M.S., Southern Connecticut State University  
M.Ed., North Carolina Agriculture & Technical State College

Jesse F. Hurley (1989)  
Psychology/Sociology  
B.A., University of Chicago  
M.A., University of Chicago

Jose G. Irizarry-Jimenez (1991)  
History  
B.A., University of Puerto Rico  
M.Ed., Inter American University of Puerto Rico

Virgil Jardine (1993)  
Law Enforcement/Management/Business/ Economics/  
Government  
A.A., Diablo Valley College  
B.A., California State University  
M.A., Golden Gate College

Addison M. Johnston (1992)  
Psychology  
B.A., Clemson University  
M.S., Auburn University  
Ph.D., Texas Tech University

Bernard C. Jones (1996)  
Law Enforcement  
B.A., Baylor University  
J.D., Baylor University

Eric L. Jones (1995)  
English  
B.A., University of South Carolina  
M.A., University of Virginia

Kirk B. Kerle (1991)  
Law Enforcement/History  
M.A., Pittsburgh State University  
J.D., Washburn University

Sam L. King (1987)  
Computer Science/Management  
B.B.A., Mercer University  
E.Ds., West Georgia College  
M.Ed., West Georgia College

Robert J. Kramer (1996)  
Mathematics  
B.S., Virginia Polytechnic Institute and State University  
Ph.D., Louisiana State University

Kenneth Kurz (1991)  
History  
B.A., San Francisco State University  
M.A., San Francisco State University

John Lackman (1989)  
Mathematics  
B.A., California State University, Long Beach  
M.A., Texas A&M University  
Ph.D., University of Iowa

Donald Landauer (1990)  
Business/Management  
B.S., University of California, Berkeley  
M.B.A., University of California, Los Angeles

Dale A. Long (1987)  
Geology/Psychology/Sociology  
M.A., Portland State University

Ruth E. Lopez (1992)  
Microcomputer Technology/Computer Science  
A.A.S., Kinsborough Community College  
B.B.S., Bernard Baruch  
M.A., New York University

Stephen Luche (1990)  
Business/Government/History/Management  
B.B.A., Longwood College  
M.A., Old Dominion University

Kimberlee Lusk (1994)  
English  
B.A., San Diego State University  
M.A., Washington State University

Linda K. Mahoney (1991)  
Mathematics  
M.Ed., University of Maryland

Robert D. Mazur (1989)  
Mathematics  
B.A., University of Florida, Gainesville  
M.A.T., University of Florida, Gainesville

Richard F. McLaughlin (1990)  
Philosophy/Psychology  
B.A., St. Alphonsus College  
M.Ed., Mount St. Alphonsus Seminary

Brendon R. Mermann (1993)  
Mathematics  
B.S., Fairfield University  
M.S., Hofstra University

Nancy Miller (1994)  
History  
A.A., Pasadena City College  
B.A., University of California, Santa Barbara  
M.A., San Diego State University

Billie E. Mobley (1987)  
Business/Management/Computer Science/Microcomputer  
Technology  
A.B.M., Tidewater Community College  
M.B.A., Old Dominion University

Phillip R. Mueller (1996)  
History  
B.A., Southern Illinois University  
M.A., Southern Illinois University  
A.B.D., Tulane University

George D. Murdoch (1987)  
English/Psychology/Speech  
M.Ed., Boston University  
M.A., University of Michigan

Joe Nation (1993)  
Sociology  
B.S., Indiana University  
M.A., New School of Social Research

Claude Newman (1990)  
Psychology/Sociology  
A.A., Phoenix Arizona  
B.A., Arizona State University  
M.A., Northern Arizona University

Vanessa D. North (1996)  
English  
B.A., Old Dominion University  
M.A., Old Dominion University

Owen J. O'Donnell (1996)  
Government/Management  
B.S., Fairfield University  
M.A., University of Arkansas

Luis F. Olivieri (1991)  
History  
B.A., University of Puerto Rico  
M.A., Florida State University

Nicholas C. Polos (1989)  
History  
B.A., Pomona College  
M.A., Harvard University  
Ph.D., University of California, Berkeley

Meredith (Ray) Ponte (1990)  
Sociology  
B.A., California State University, Long Beach  
B.S., California State University, Long Beach  
M.A., University of California, Riverside

Ralph Keith Puckett (1991)  
Mathematics  
A.S., Wayne Community College  
B.S., North Carolina State University  
M.S., University of South Carolina

Reagan Ragsdale (1987)  
English  
B.A., Samford University  
M.A., Samford University

George A. Renn (1987)  
English  
M.A., Old Dominion University

Richard L. Rider (1988)  
English/Speech  
A.B., University of Nebraska  
M.F.A., Yale University  
Ph.D., University of Illinois

Ismael Rodriguez (1991)  
Law Enforcement/Management  
B.S., Wichita State University  
M.A., Webster University

James G. Rose (1992)  
Mathematics/Physics  
B.A., Augustana College  
M.S., University of Louisville

Paul M. Ryan (1987)  
Business/Management/Real Estate/History  
B.A., Seattle University  
M.B.A., National University

Gordon E. Shockley, Sr. (1988)  
Real Estate/Business/Management  
B.S., St. Joseph's College  
M.A., East Carolina University

Robert Seilor (1990)  
Law Enforcement  
B.S., California State University, Los Angeles  
M.P.A., Pepperdine University

Timothy Simon (1992)  
English  
B.A., Southeast Missouri State University  
M.A., Southeast Missouri State University

Gary Smith (1992)  
English  
A.A., San Jose City College  
B.A., San Jose State University  
M.A., San Jose State University

Marilyn S. Stalzer (1991)  
Biology  
B.A., St. Xavier College  
M.A., University of Puerto Rico

Nicolas S. Staresinic (1989)  
Mathematics/Science  
B.S., University of Pittsburgh  
Ph.D., Massachusetts Institute of Technology

Melvin L. Strand (1996)  
English  
B.S., Mankato State University  
M.S., Mankato State University  
M.S., Bemidji State University  
Ed.D., University of South Dakota

Joseph Strang (1993)  
English  
B.A., Marist College  
M.A., St. John's University

Howard I. Streifford (1989)  
English  
B.A., University of California, Berkeley  
M.A., San Francisco State University  
Ph.D., Southern Illinois University

Michelle J. Syriac-Smith (1996)  
Business/Management  
B.B.A., National University  
M.B.A., National University

Anthony G. Talarico (1987)  
English/Spanish  
B.A., Queens College  
M.A.T., The Citadel

Linda Taylor (1993)  
English  
A.A., Hinds Junior College  
B.S., Mississippi College  
M.Ed., University of Texas

Wallace Taylor (1990)  
English  
B.S., Illinois State University  
M.A., Eastern Illinois University

Donald Thomas (1992)  
Mathematics/Physics  
B.S.E.E., San Diego State University  
M.S.E.E., Syracuse University  
Ph.D., Syracuse University

Stephen Thorn (1993)  
History  
A.A., Grossmont College  
B.S., California Polytechnic University  
M.A., University of San Diego

Paul L. Trittschuh (1991)  
Mathematics  
M.Ed., Wright State University

Arthur K. Van Tassel (1989)  
English  
B.A., San Diego State University  
M.A., University of Texas, El Paso

Roger L. Vernon (1991)  
History  
B.E., Chicago Teacher's College  
M.A., Northwestern University  
Ph.D., Loyola University of Chicago

Craig A. Webster (1996)  
Business/Management  
B.A., Miami University  
M.S., San Francisco State University

Dorothy A. Welzen (1996)  
Mathematics  
B.A., Loyola University  
M.A., Loyola University

John B. Westbury (1987)  
Mathematics  
B.S., University of South Carolina  
M.Ed., University of Georgia

Desmond White (1987)  
Business/Management  
B.A., University of Texas, Austin  
M.B.A., University of Houston

Leslie Whitman (1989)  
Business  
B.A., University of South Florida  
M.A., National University, San Diego

Curt Willits (1989)  
English/History  
B.A., Florida State University  
M.A., Florida State University  
Ph.D., Florida State University

Edward Wilson (1984)  
Computer Science  
B.S., Massachusetts Institute of Technology  
M.S., Massachusetts Institute of Technology

James C. Wood (1991)  
English  
B.A., University of Nevada, Reno  
M.A.T.E., University of Nevada, Reno

William R. Zicafoose (1996)  
History  
A.A., Meridian Junior College  
B.S., Mississippi State University  
M.A.T., Mississippi State University

## Pacific Far East Campus

Song Su An (1995)

Computer Science/Microcomputer Technology

A.A., Youngnam Technical College

B.S., KyongPuk Industrial University

M.S., KyongPuk National University

Merrill G. Andrus (1991)

Mathematics

B.A., Brigham Young University

Ph.D., University of Washington

James A. Bitting (1980)

Automotive Technology

A.G.S., Central Texas College

Leo G. Bonner (1996)

Early Childhood Professions

B.A., Texas Southern University

Ph.D., University of Wisconsin

Bruce C. Borko (1996)

Business/Management

B.S., University of Pittsburgh

M.B.A., Central State University

Ernest N. Bracey (1994)

Management

B.A., Jackson State University

M.P.A., Golden Gate University

M.A., Catholic University

Ph.D., George Mason University

Karen Broadmeadow (1995)

Management

A.A., Vermont College

B.S., Norwich University

M.A., Webster University

Calvin R. Buckner, (1993)

Law Enforcement

A.A.S., Western Piedmont Community College

B.S., Gardner-Webb College

Brent E. Carney (1995)

Hospitality Management/Culinary Arts

B.A., Kansas State University

Jeong Ja Chang (1990)

Management

B.A., Ewha Women's University

M.B.A., University of Pittsburgh

Brian Chapman (1995)

Microcomputer Technology/Word Processing

A.A., Palm Beach Community College

B.S., University of Maryland

M.A., Webster University

Soon Joung Chung (1989)

Fine Arts

B.A., Hong-Ik University

M.A., University of North Texas

Alvin J. Crittall (1996)

Data Processing

B.S., Southwest Texas State University

M.A., Webster University

Brian Duffy (1996)

Emergency Medical Technology/Management

A.S., Cooke County Junior College

B.S., Southwest Texas State University

M.S., Troy State University

Ph.D., Columbia State University

Bryn M. Everitt (1984)

Automotive Technology

A.A.S., Central Texas College

Robert T. Fuentes (1985)

Management

A.A.S., El Paso Community College

B.A./A.A., University of New York

M.S.W., Our Lady of the Lake University

Robert J. Furse (1992)

Management

B.A., University of Maryland

Keith Gaines (1995)

Law Enforcement

B.S., University of Maryland

M.S., Jacksonville State University

Mary R. Glasgow (1992)

Management

B.S., Auburn University

M.S., Carnegie Mellon

Norman H. Graves (1990)

Hospitality Management/Culinary Arts

A.A.S., Central Texas College

Phillip W. Gray (1990)

Business/Management

B.A., University of Missouri

M.P.A., Penn. Mil. College (Widener College)

Richard B. Hark (1984)  
Management  
A.A., Leeward Community College  
B.A., University of Hawaii  
M.A., University of Hawaii

Linda L. Higgins (1991)  
English  
B.A., Southern Illinois University  
M.A., University of Arizona

Hwi Shin Hong (1987)  
Management/Mathematics  
B.A., Ewha University  
M.S., Massachusetts College of Pharmacy  
Ph.D., Massachusetts College of Pharmacy

Thomas W. James (1991)  
Management  
A.A.S., Central Texas College

Lynne C. Jeon (1992)  
Fine Arts  
B.F.A., Cleveland Institute of Art  
M.A., Hong Ik University

Keith A. Johnston (1994)  
Fine Arts/Management/Microcomputer Technology  
B.A./B.M., University of Washington  
M.F.A., Princeton University

Gerald D. Keener (1992)  
Management  
B.S., University of New York

Byong S. Kim (1989)  
Management  
B.A., Florida Presbyterian College  
Th.M., Princeton University  
Ph.D., Emory University

Jeong Y. Kim (1994)  
English  
M.A., New York University

Youngdahl J. Kim (1994)  
History  
B.A., City University of New York  
M.A., Hunter College  
M.A., Rutgers University

Carlos Kizzee (1996)  
Legal Assistant/Law Enforcement  
B.S., United States Naval Academy  
J.D., Georgetown University

Russell W. Krogh (1991)  
Law Enforcement/Management  
A.G.S., Central Texas College

Kenneth E. Kuehn (1991)  
Microcomputer Technology  
A.A.S., Community College of the Air Force  
B.S., Community College of the Air Force

Deborah L. Lee (1992)  
Art/Music  
B.A., Boston University  
M.A., Texas Women's University

Erica Linthorst (1992)  
Developmental Studies  
B.A., University of Iowa  
M.Ed., University of Rochester

Michael Long (1996)  
Law Enforcement  
A.A., Central Texas College

Katherine Loukopoulos (1993)  
Psychology/Law Enforcement  
B.A., City College of City University, New York  
M.A., John Jay College of Criminal Justice

Deborah Marconda (1995)  
English  
B.A., Chaminade University of Honolulu  
M.A., University of Miami

Dana Marcos (1996)  
Humanities  
B.A., Hawaii Loa College  
M.A., California State College

Darwin V. Maxon (1983)  
Management  
B.A., University of Maryland

William E. McDaniel (1994)  
Microcomputer Technology  
A.A.S., Central Texas College

Billie J. McGonegal (1996)  
Sociology  
B.A., University of Oregon  
M.S., Troy State University

James E. Misch (1992)  
Law Enforcement/Management  
B.A., St. Mary's College

Peter Declan Morrissey (1990)  
Management  
A.A., Kapiolani Community College  
B.A., University of Hawaii  
B.A., SUNY  
M.A., Webster University

Kenneth Morse (1995)  
Law Enforcement  
A.A., Campbell University  
B.S., Campbell University

Mi A Mun (1992)  
Microcomputer Technology  
B.S., University of Florida

Ronald Munsee (1995)  
Mathematics  
M.A., University of California

Kenneth J. Musat (1992)  
Management/Computer Science  
A.A.S., Northern Virginia Community College  
B.A., Wittenberg University

Kevin E. Newhart (1992)  
Microcomputer Technology  
B.B.S., Pacific Union College  
B.S., Pacific Union College

Nancy Paik (1996)  
Microcomputer Technology/Word Processing  
B.S., Old Dominion University  
M.B.A., Chaminade University

Donald W. Pennington (1992)  
Law Enforcement  
A.S., City Colleges of Chicago

Daniel A. Pinkston (1996)  
Government  
B.A., Regents of New York  
M.A., Yonsei University  
Ph.D., University of California

Glenda L. Quarnstrom (1996)  
Government  
B.A., Barnard College  
M.I.A., Columbia University  
Ph.D., University of Hawaii

Jeffrey E. Radford (1983)  
Law Enforcement  
A.G.S., Central Texas College  
B.S., University of New York

Geraldine B. Rhodes (1992)  
Fine Arts  
A.A., All Saints Junior College  
M.A., Columbia University  
B.M.E., Southern Methodist University

Yeon H. Roman (1990)  
Microcomputer Technology  
B.S., University of Maryland

Floyd L. Rosamond (1995)  
Microcomputer Technology  
A.G.S., Central Texas College  
B.S., Southern Illinois University

Sandra L. Rosso (1996)  
Speech  
Ph.D., Ohio State University

Armando Sanchez (1990)  
Microcomputer Technology  
B.A., University of Maryland  
M.B.A., University of Oklahoma  
D.B.A., Western Colorado University

Edward B. Scott (1996)  
Microcomputer Technology  
A.A.S., Central Texas College

Bernard J. Sheehan (1986)  
Management  
B.A., University of Maryland

Danny J. Sherrill (1992)  
Management  
A.A., Chabot College  
B.A., California State University  
M.D.A., Golden Gate University

Mark B. Straughan (1988)  
Management  
A.A., Los Angeles Metro College  
A.A., Central Texas College  
B.S., University of Maryland

Robert Sullivan (1996)  
History  
B.A., Bridgewater State College  
M.A., Kansas State University

Michael W. Swanson (1987)  
Microcomputer Technology  
A.A.S., Central Texas College

Thomas M. Tabbert (1995)  
Management  
B.S., University of Maryland

Richard E. Thomas (1987)  
Management/Accounting/Business/Real Estate  
B.A., Chapman College  
M.B.A., Chapman College

Michael Van Alstine (1993)  
Law Enforcement  
A.A., Chaminade University of Honolulu  
B.S., Troy State University

Richard L. Vitale (1988)  
Management  
B.A., College of Emporia

Robert G. Wahl (1989)  
Management  
A.A., Northern Virginia Community College  
B.A., Georgia State University  
M.Ed., University of Southern California  
M.A., National University

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# Central Texas College Around the World

as of June 1997

## Central Campus

Killeen

## Fort Hood & Service

### Area Campus

Brady  
Burnet  
Fort Hood  
Gatesville  
Hamilton  
Lampasas  
Mason  
San Saba

## Continental Campus

### Alaska

Fort Greely  
Fort Richardson  
Fort Wainwright

### California

Camp Pendleton

### District of Columbia

Bolling AFB

### Georgia

Fort Stewart  
Hunter Army Airfield

### Hawaii

Fort Shafter  
Schofield Barracks  
Tripler Army Medical Center

### Kansas

Fort Riley

### Kentucky

Fort Knox

### Louisiana

Fort Polk

### Missouri

Fort Leonard Wood

### New Mexico

Holloman AFB

### North Carolina

Fort Bragg  
Pope AFB

### Virginia

Fort Lee

### Washington

Fort Lewis

### Honduras

Soto Cano Air Base

### Panama

Fort Clayton  
Fort Kobbe  
Fort Sherman

## U.S. Embassies Worldwide

## Ships at Sea Worldwide

## Navy Campus

### California

Lemoore NAS  
San Diego

### Connecticut

New London

### Florida

Jacksonville  
Mayport  
Pensacola

### Hawaii

Pearl Harbor

### Illinois

Great Lakes

### Pennsylvania

Philadelphia

### Rhode Island

Newport

### South Carolina

Charleston

### Virginia

Norfolk

### Washington

Bangor  
Bremerton  
Whidbey Island

### Cuba

Guantanamo Bay

### Iceland

Keflavik

### Italy

Sigonella

### Puerto Rico

Fort Buchanan  
Roosevelt Roads  
Sabana Seca

### Spain

Rota

## Europe Campus

### Bosnia

Bedrock

Colt

Commanche

Demi

Dobol

Guardian Base

Tuzla

### Belgium

NATO

SHAPE

### Croatia

Slavonski Brod

### Egypt

Sinai-North Camp  
Sinai-South Camp

## Germany

Ansbach  
Babenhausen  
Bad Kreuznach  
Bamberg  
Baumholder  
Buedingen  
Darmstadt  
Dexheim  
Friedberg  
Geissen  
Grafenwoehr  
Hanau  
Heidelberg  
Hohenfels  
Illesheim  
Kaiserslautern  
Kitzingen  
Mannheim  
Ramstein  
Schweinfurt  
Schwetzingen  
Spangdahlem  
Stuttgart  
Vilseck

Vogelweh  
Wiesbaden  
Wuerzburg

## Greece

Souda Bay

## Holland

AFCENT

## Hungary

Taszar

## Iceland

Keflavik

## Italy

Aviano

Livorno

Naples

Sigonella

Vicenza

## Kuwait

Camp Doha

## Macedonia

Able Sentry

## Spain

Rota

## Turkey

Incirlik

Izmir

## United Kingdom

Alconbury  
Croughton  
Lakenheath  
London  
Mildenhall

## Pacific Far East Campus

### Indian Ocean

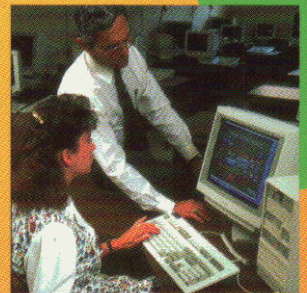
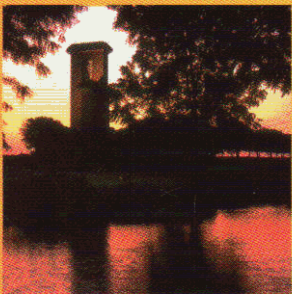
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### Japan

Akizuki  
Atsugi NAS  
Camp Zama  
Iwakuni Mcas  
Misawa Air Base  
Sasebo NB  
Yokosuka NB  
Yokota Air Base  
Johnston Island

### Korea

Camp Bonifas  
Camp Carroll  
Camp Casey  
Camp Colbern  
Camp Edwards  
Camp Essayons  
Camp Greaves  
Camp Henry  
Camp Hovey  
Camp Howze  
Camp Humphreys  
Camp Jackson  
Camp Kyle  
Camp La Guardia  
Camp Liberty Bell  
Camp Long  
Camp Page  
Camp Pelham  
Camp Red Cloud  
Camp Sears  
Camp Stanley  
Camp Stanton  
Camp Walker  
K2 Air Base  
K16 AAF  
Kunsan Air Base  
Osan Air Base  
Pusan  
Suwon Air Base  
Yongsan Main Post  
Yongsan S. Post  
**Okinawa**  
Camp Butler  
Camp Courtney  
Camp Foster  
Camp Hansen  
Camp Kinser  
Camp Lester  
Camp McTureous  
Camp Schwab  
Camp Shields  
Futenma  
Kadena Air Base  
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