

CENTRAL TEXAS COLLEGE



**CONTINENTAL & INTERNATIONAL CAMPUSES
CATALOG 1995-1997**

Changing lives one degree at a time

MAJOR CAMPUS ADDRESSES COLLEGE PROGRAMS

CENTRAL CAMPUS

CENTRAL TEXAS COLLEGE
P.O. Box 1800
Killeen, Texas 76540-9990
1-817-526-7161
1-800-792-3348

FORT HOOD CAMPUS

CENTRAL TEXAS COLLEGE
Dean, Fort Hood and
Service Area Campuses
P.O. Box 1800
Killeen, Texas 76540-9990
1-817-526-1328

SERVICE AREA CAMPUS

CENTRAL TEXAS COLLEGE
Dean, Fort Hood and
Service Area Campuses
P.O. Box 1800
Killeen, Texas 76540-9990
1-817-526-1206

CONTINENTAL CAMPUS

CENTRAL TEXAS COLLEGE
Office of the Dean
P.O. Box 1800
Killeen, Texas 76540-9990
1-817-526-1222/1368

NAVY CAMPUS

CENTRAL TEXAS COLLEGE
Office of the Dean
P.O. Box 1800
Killeen, Texas 76540-9990
1-817-526-1356
1-800-792-3348 (Out of State)
1-800-223-4760 (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
1-804-587-8873
1-800-457-2619

NAVY PACIFIC CAMPUS

CENTRAL TEXAS COLLEGE
4250 Pacific Highway, Suite 128
San Diego, California 92110
1-619-226-6626
1-800-784-5470

PACIFIC FAR EAST CAMPUS

CENTRAL TEXAS COLLEGE
Office of the Dean
Office of Student Services
Office of Operations/Support Services
Office of Educational Programs
Office of Payroll/Personnel
Campus Library
Camp Market - Building P-1530
Unit #15559
APO AP 96283-0618
(Civilian) 82-32-523-5110
(Civilian) Telefax 82-32-523-8554
(Military) 722-3814/3833 Dean,
Support Ed Programs
(Military) 722-3815 Student Services

Students should become familiar with the contents of this catalog and should bring their catalogs with them to the campus for degree planning and scheduling.

CORRESPONDENCE AND INQUIRIES

Correspondence and inquiries should be addressed to the appropriate office, e.g., Admissions, Records, Student Financial Assistance, etc., as listed in the catalog, at the location where the student currently attends. Records and transcript service for students currently enrolled in Pacific Far East or Europe will be provided by the appropriate Pacific Far East or Europe Campus. 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

Central Texas College District **Continental and International Campuses**

Eleventh

1995-1997

GENERAL CATALOG

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 1 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

TABLE OF CONTENTS

FACULTY	vi
STATEMENT OF PURPOSE	1
GENERAL INFORMATION	3
ADMISSIONS AND REGISTRATION	4
TUITION AND FEES	8
STUDENT SERVICES	9
STUDENT FINANCIAL ASSISTANCE	12
ACADEMIC POLICIES	14
STUDENT RESPONSIBILITIES	20
CERTIFICATE AND DEGREE REQUIREMENTS	22
PROGRAMS OF STUDY	27
COURSE DESCRIPTIONS	83
CONTINUING EDUCATION	172
INDEX	173

BOARD OF TRUSTEES

Margaret A. Bay
Harker Heights, Texas
President

Mary H. Kliever
Killeen, Texas
Vice President

Charles B. Baggett
Copperas Cove, Texas
Treasurer

Mary Ann Kelley
Harker Heights, Texas
Secretary

Riley J. Simpson
Copperas Cove, Texas

Mari M. Meyer
Harker Heights, Texas

Don R. Armstrong
Killeen, Texas

EXECUTIVE OFFICERS

James R. Anderson, *Chancellor*
B.B.A., Michigan State University
M.B.A. Florida State University
Ph.D., Florida State University

Robert C. Farrell, *Deputy Chancellor for Resource Management*
B.S., Tarleton State University
Certified Public Accountant

Alvin Ornstein, *Executive Director, College Development*
B.S., University of Omaha
M.S., Air Force Institute of Technology
Ohio State University

E.H. Shemwell, *Deputy Chancellor for Campus Operations*
B.S., Washington State University
M.S., George Washington University

**Ben H. Wickersham, *Deputy Chancellor for Educational
Program and Support Services***
A.A., Kilgore College
B.S., East Texas State University
M.S., East Texas State University
Additional Graduate Study:
Texas A&M University
University of Texas at Austin

PERSONNEL

CAMPUS DEANS

Lois A. Anderson
Don L. Martin
Fred J. Ostertag
John E. Pierson
Jim M. Yeonopolus

Dean, Continental Campus
Dean, Pacific Far East Campus
Dean, Europe Campus
Dean, NAS Millington, Tennessee
Assistant Deputy Chancellor, Campus
Operations/Dean Navy Campus

STAFF

Ashley I. Abramson
Schenell Agee
Milton W. Alexander
John Attanasio

Director of Test/Eval-Ashore Coordinator, Navy Pacific
Site Director, Fort Wainwright
Associate Dean/ATC Maint-NAS Millington, Tennessee
Regional Director, Republic of Korea (South)
Pacific Far East Campus
College Program Coordinator, Navy Atlantic
Administrative Services Officer, Navy Atlantic
Student Services Officer, Navy Pacific
Site Coordinator, Groton, Connecticut (Navy Atlantic)
Site Director, Camp Pendleton, California
Director, Military Training & Educational Support Services,
Regional Director, Southern & Eastern Germany,
and Southwest Asia

Ken Austin
John F. Baumgardner
Marcial P. Bautista
Jennifer Beatty
Nancy Bergstrom
Frederick H. Borneman

Administrative Officer, NAS Millington, Tennessee
Site Coordinator, Norfolk, Virginia (Navy Atlantic)
Site Director, Fort Lee, Virginia
Director, Student Services, Pacific Far East Campus
Area Director, Hawaii
Director, College Programs & Student Services, Europe Campus
Site Coordinator, Mayport, Florida (Navy Atlantic)
Site Director, Fort Stewart, Georgia
Site Coordinator, Pearl Harbor, Hawaii (Navy Pacific)
Regional Director, Central Germany, United Kingdom,
Iceland, & Sinai

Vernon R. Bowen
Violeta C. Briody
James W. Corrigan
Jack L. Conway
Colvin Davis
Lisa R. Downs
Henry J. Gartland
Don Giddens
Pamela Gosla
Barbara A. Grice

Site Director, Bolling Air Force Base, Washington, D.C.
Site Director, Panama/Honduras
Site Coordinator, Fort Bragg, North Carolina
Site Coordinator, Fort Sill, Oklahoma/U.S. Embassies,
Central & South America

Alethea Hamilton
Peter Hershfield
Peggy Hewitt
Virginia L. Jicha

Site Director, Fort Greely, Alaska
Regional Director, Okinawa & Diego Garcia, Pacific Far East Campus
Associate Dean, Continental Campus
Site Coordinator, Pope Air Force Base, North Carolina
Site Coordinator, Newport, Rhode Island (Navy Atlantic)
Foreign Language Coordinator, Fort Bragg, North Carolina
Director, Human Resources, Europe Campus
Associate Dean, Navy Atlantic Programs
Associate Dean, Educational Programs, Pacific Far East Campus

Kevin Kelly
Neal Kepler
Gary Kindred
Crystal Kennedy
Elizabeth A. Lane
Don Leffew
Clara H. Maher
Peter M. Maloney
Gilbert S. Mezz

Charles S. Miller	Director/Basic-NAS Millington, Tennessee
Oliver Miller	Site Director, Fort Buchanan, Puerto Rico
Wendy Miller	Student Services Officer, Navy Atlantic
Edward J. Minnerly	Manager, Support/Auxiliary Services, Pacific Far East Campus
Edmond R. Murphy	Associate Dean/Avionics-NAS Millington, Tennessee
Teodoro Orendain	Business Manager, Pacific Far East Campus
Luis R. Ortiz	Site Coordinator, Honduras
Marguerite C. Park	Manager, Payroll/Personnel, Pacific Far East Campus
Irene W. Preiss	Site Coordinator/Instructor, Bremerton, Washington (Navy Pacific)
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 (North), Pacific Far East Campus
Douglas M. Rose	Site Coordinator, Alameda, California (Navy Pacific)
Daniel Sadowitz	Director, Library Services, Pacific Far East Campus
Alisha Scanlon	Site Director, Holloman Air Force Base
Ronald N. Semarge	Site Director, Fort Riley, Kansas
Herman Shusterman	Regional Director, Mainland Japan, Pacific Far East Campus
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	Director, Air Force & Navy Programs & Regional Director, Western Germany, the Benelux Countries, the Mediterranean Area, & the Azores
Neil Teske	Site Director, Fort Polk, Louisiana
Ulla Torres	Site Director, Fort Lewis, Washington
Patty F. Vach	Site Coordinator/Instructor, Japan (Navy Pacific)
Ilse Wakley	Coordinator, Navy Campuses
Robert G. Wahl	Director, Administrative Services, Pacific Far East Campus
Joan M. Waldrop	Site Director, Fort Knox, Kentucky
Desmond White	PACE Coordinator (Navy Pacific)
Robert R. White	Site Coordinator, Naples, Italy (Navy Atlantic)
Dale H. Wilson	Associate Dean, 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

TERM CALENDAR

1995-1996

Term 1	August 13, 1995	through	October 14, 1995
Term 2	October 15, 1995	through	December 23, 1995
Term 3	December 24, 1995	through	March 9, 1996
Term 4	March 10, 1996	through	May 11, 1996
Term 5	May 12, 1996	through	August 10, 1996

1996-1997

Term 1	August 11, 1996	through	October 19, 1996
Term 2	October 20, 1996	through	December 21, 1996
Term 3	December 22, 1996	through	March 8, 1997
Term 4	March 9, 1997	through	May 10, 1997
Term 5	May 11, 1997	through	August 9, 1997

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

FACULTY

CONTINENTAL CAMPUS

Marv Abrams, Faculty

GOVERNMENT

B.A., San Diego State University

M.A., San Diego State University

Tiwanda Allen, Faculty (1994)

MATHEMATICS

B.S., North Carolina State University

M.A., North Carolina State University

Siamak Araghi, Faculty (1987)

MANAGEMENT

B.S., Institute of Advance Accounting

M.B.A., Marshall University

Ph.D., Newport University

Gwendolyn Bailey, Faculty

ENGLISH

M.A., University of Patricia Crockett

M.A., Lincoln University

John F. Bash, Faculty (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

Stephen Beattie, Faculty

MAINTENANCE TECHNOLOGY

A.A.S., Central Texas College

B.A., Columbia College

M.S.E., Drury College

William Begg, Faculty (1991)

CRIMINAL JUSTICE

B.S., Fordham College

M.A., Webster University

Mark Bergman, Faculty

CRIMINAL JUSTICE

A.A.S., Central Texas College

B.S., Fayetteville State University

M.B.A., Webster University

Dwight Brace, Faculty

AUTOMOTIVE REPAIR

A.A.S., Pikes Peak Community College

A.S.E., Master Tech/Auto

Linda Chambers, Faculty (1994)

COMPUTER SCIENCE

B.A., Bluefield State

M.A., Strayer College

Paul W. Collins, Faculty

SOCIOLOGY/PSYCHOLOGY

B.S., Northern Michigan University

M.A., Northern Michigan University

Charles Constantini, Faculty

HISTORY

B.A., Yale

M.A., Yale

Ph.D., University of California, Berkley

Michael Cox, Faculty

PSYCHOLOGY

B.S., Eastern New Mexico University

M.A., New Mexico Highlands Univ.

Ed.S.(Masters), Eastern New Mexico
University

Ph.D., United States International University

Michael H. Curlee, Faculty (1980)

LAW ENFORCEMENT

A.S., Midlands Technical College

B.A., Coker College

Vicki Davis, Faculty (1989)

ENGLISH

A.B., Randolph-Macon Women's College

M.A., Virginia State University

Post Graduate Studies, VA State University

Michael S. Dresden, Faculty (1986)

AUTOMOTIVE/MAINTENANCE

A.A.S., Central Texas College

James A. Dula, Faculty (1989)

ENGLISH/SPEECH

B.A., Upper Iowa University

M.A., University of Oklahoma

Edward H. Eisner, Jr., Faculty (1986)

MANAGEMENT

B.A., Saint Leo College

Mel Ellinger, Faculty

WELDING

A.A.S., Central Texas College

Certified AWS

Frank Elliott, Faculty
SMALL GAS ENGINE
A.A.S., Central Texas College

Moir Fescina, Faculty (1990)
MATHEMATICS/MANAGEMENT
B.A., Lady Cliff College
M.B.A., Campbell University

Sharon G. Fischer, Faculty
HISTORY
B.S., University of North Dakota
M.S., Troy State University

Linda A. Flynn, Faculty (1992)
SOCIAL SCIENCE/PSYCHOLOGY
B.A., Russell Sage College
M.A., University of New York

Douglas E. Freed, Faculty (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, Faculty
SPEECH
B.A., Speech/Theatre, Northeastern Illinois
University
M.A., Speech/Theatre, Northeastern Illinois
University

Dennis Geisler, Faculty
SOCIAL SCIENCE/HISTORY
B.S., Missouri State
M.S., Missouri State
M.A., Missouri State

Robert G. Geisler, Faculty (1990)
AUTOMOTIVE
A.A.S., Central Texas College

Richard Gilbert, Faculty
ENGLISH
M.A., Trinity University
M.S., Long Island University

Beth E. Gillmer-Jones, Faculty (1989)
LAW ENFORCEMENT
B.S., Dr. Martin Luther College

Frank B. Gray, Jr., Faculty
MATHEMATICS
B.S., Aeronautical Eng., Ohio State Univ.
M.S., Aeronautical Eng., Ohio State Univ.
PhD, Industrial Engineering/Experimental
Statistics, New Mexico State University

James J. Grimm, Faculty (1983)
MANAGEMENT
B.S., University of Connecticut
M.S., University of Southern California
M.S., Kansas State University

Sam C. Grizzle, Faculty (1991)
SOCIAL SCIENCE/GOVERNMENT
B.S., Troy State University
M.S., Troy State University

Michael L. Gross, Chief, VoTech (1985)
AUTOMOTIVE
B.S., Fort Hays State University
M.S., Kansas State University

Kenneth P. Grosselin, C.P.A., Faculty (1992)
MANAGEMENT/ACCOUNTING
B.S., West Virginia University
B.O.M., University of La Verne

Samuel Gunther, Faculty
MANAGEMENT/COMPUTER SCIENCE/
OFFICE ADMINISTRATION
M.A., Webster University

Lynn J. Hancsak, Faculty (1989)
SCIENCE/EARTH SCIENCE
B.S., University of Akron
M.S., University of Toledo

William D. Hayes Jr., Faculty (1993)
INTERNATIONAL RELATIONS/
GOVERNMENT
B.A., Univ of South Carolina
M.S., Campbell University

Javier Hernandez, Faculty
SPANISH
B.A., San Diego State University
M.A., San Diego State University

Henry H. Horton, Faculty (1989)
LAW ENFORCEMENT
B.S., Eastern Tennessee State University
M.S., George Washington University

Susan Horton, Faculty (1994)
GOVERNMENT
B.S., Pennsylvania State University
M.A., Univ. of California at Santa Barbara
Ph.D. (ABD), University of Maryland,
College Park

John Isakson, Faculty
BUSINESS
B.A., National University
M.B.A., National University

Dennis Jana, Faculty
HISTORY
B.A., De Paul University
M.A., University of San Diego

Zabe Jenkins, Faculty (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, Faculty (1992)
LAW ENFORCEMENT
A.A., Ferrum College
B.A., Hiram Scott College
Masters degree work in progress -
University of Pittsburg

Michael Jones, Faculty
PSYCHOLOGY
B.A., McKend College
M.S., Bangor University

Devin C. Kelly, Faculty
GOVERNMENT
B.S., University of Kentucky
M.S., Troy State University

Robert Lemon, Faculty
MANAGEMENT
M.A., Webster University

Steven Lerner, Faculty
COMPUTER SCIENCE
B.A., National University

Kimberly A. Lovalenko, Faculty
SOCIOLOGY
B.S., Walla Walla College
M.S., Walla Walla College

Javors Lucas, Jr., Faculty (1995)
COMPUTER SCIENCE
B.S., Tuskegee Institute
M.S., Bowie State University

Harold D. Macumber, Faculty (1987)
PSYCHOLOGY/SOCIOLOGY/
MANAGEMENT
B.A., Henderson State College
M.A., Webster University

Farrell D. Maichel, Faculty (1985)
MANAGEMENT
B.S., Kansas State University
M.S.B.A., University of Northern Colorado

Susan McCormick, Faculty
ENGLISH
B.A., Long Beach State College
M.A., California State College, Long Beach

Richard A. McKinley, Faculty (1985)
FOOD SERVICE MANAGEMENT
A.A.S., Central Texas College
B.A., Saint Leo College
M.Ed., Virginia State University
Certificate of Advanced Study, Virginia Univ.

Leonard Meyer, Faculty
MATHEMATICS/COMPUTER SCIENCE
B.S., University of Missouri
M.S., University of Missouri
Ed.D., University of Missouri

Steven B. Michael, Faculty (1987)
SOCIAL SCIENCE/HISTORY
B.A., Mount Vernon Nazarene College
M.A., Ohio State University
Ph.D., Ohio State University

Peggy A. Miles, Faculty (1987)
EARLY CHILDHOOD PROFESSIONS
B.A., Western Michigan University
M.A., Western Michigan University

Leonard R. Miller, Faculty
MANAGEMENT
B.S., Electrical Engineering, Chapman University
M.S., Human Resource Management,
Golden State University

Walter Molyneaux, Faculty
AUTOMOTIVE TECHNOLOGY
B.S., Southern Illinois University
A.S.E., Certification, Master Mechanic

John Moran, Faculty (1994)
LAW ENFORCEMENT
A.A., University of Maryland
B.S., University of Maryland
Masters degree in progress-Johns Hopkins
University

Robert E. Mullin, Faculty (1985)
ENGLISH
A.A., Kansas City Junior College
B.S.E., Emporia State Teachers College
M.A., Emporia State Teachers College

Angela Neel, Faculty (1991)
COMPUTER SCIENCE
B.S., Mississippi State University
M.A., Webster University

Joseph Nolan, Faculty
ECONOMICS
B.S., U.S. Naval Academy
M.S., Naval Postgraduate School

Hope P. Patterson, Faculty
ENGLISH
B.A., North Georgia College
M.S., Michigan State University

Charles L. Perry, Faculty (1987)
MANAGEMENT
B.A., Mercer University
M.A., Georgia College

David P. Phalen, Faculty (1991)
ENGLISH
B.A., Iowa State
M.A., University of Mississippi

James A. Phelps, Faculty (1987)
MATHEMATICS
B.A., North Dakota State University
M.S., Auburn University of Montgomery
M.B.A., Creighton University

D.J. Reck, Faculty
AUTOMOTIVE
A.A.S., Central Texas College
A.S.E., Master Tech Automotive

Willie J. Rowell, Faculty (1987)
LAW ENFORCEMENT
B.S., Chaminade College of Honolulu

Joseph Sawaya, Faculty
MATHEMATICS
A.A., St. Bernard College
B.A., University of Southern California
M.S.C., University of Southern California
Ph.D., United States International University

Ronald N. Semarge, Faculty (1985)
MANAGEMENT/MICROCOMPUTER
A.A., New Mexico State University
B.A., Park College
M.B.A., Kansas State University

Glenn Schwaiger, Faculty
FINE ARTS
B.F.A., Ceramics, University of Illinois
M.F.A., Fine Arts, New Mexico State University

Kerry Scott, Faculty (1994)
LAW ENFORCEMENT
B.A., University of Albuquerque

Baxter J. Sessums, Faculty (1991)
ACCOUNTING
B.S. (Accounting), University of Richmond
M.A. (Accounting), University of Richmond

Michael Shafer, Faculty (1994)
SOCIAL SCIENCE
B.S., Park College
M.S., Texas Tech University

Henry G. Sharber III, Faculty (1991)
COMMUNICATIONS
B.S., Randolph-Macon College
M.S., Virginia Commonwealth University

Samuel R. Shumaker, Faculty (1987)
COMMUNICATIONS/ENGLISH
B.A., Duke University
M.A., Vanderbilt University
Ed.S., George Washington University

Ira Singer, Faculty
GOVERNMENT/HISTORY
M.A., Ohio State University

Curtis Smith, Faculty (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, Faculty (1988)
AIR CONDITIONING
A.A., El Paso Community College

James Speed, Faculty (1990)
ENGLISH
B.S., Jackson State University
M.A., Jackson State University

Joyce Starks, Faculty (1994)
COMPUTER SCIENCE
B.S., Southern University

Kristen Stonebreaker, Faculty
SPEECH
B.A., San Diego State University
M.A., San Diego State University
Ph.D., University of San Diego

Lori Strader, Faculty
HISTORY
B.S., Abilene Christian University
M.A., Abilene Christian University

David Taylor, Faculty
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 Thomas, Faculty
LAW ENFORCEMENT
A.A.S., Northern Virginia Community College
B.S., Eastern Kentucky University
M.S., Eastern Kentucky University

Vincent Velotte, Faculty (1994)
LAW ENFORCEMENT
B.B.A., St. John's University

Helen D. Walls, Faculty (1989)
COMMUNICATIONS/SPEECH
B.A., Howard University
M.A., Howard University
Ed.D., George Washington University

Clifford E. White, Faculty (1989)
LAW ENFORCEMENT
B.S., Wichita State University

Nathaniel Wilson, Faculty (1986)
MANAGEMENT
B.A., University of Alaska
M.A., Central Michigan University

Craig Wookfolk, Faculty (1988)
MATHEMATICS
B.S., SUNY-Brockport
M.A., SUNY-Brockport

Rex E. Young Jr., Faculty
B.S., Wayland Baptist University
M.S., University of La Verne

Robert Young, Faculty
ENGLISH
B.A., University of Oklahoma
M.A., Central State University, Oklahoma
Ph.D., Idaho State University

EUROPE CAMPUS

David W. Alexander, Faculty (1994)
EMERGENCY MEDICAL TECHNOLOGY
A.A., Tallahassee Community College
B.S., Austin Peay State University

Joel Alvary, Faculty (1993)
LEGAL ASSISTANT
B.S., USMA West Point
J.D., Fordham Law School

Bobby Anderson, Faculty (1994)
MILITARY SCIENCE
B.S., Tennessee Tech. University
M.A., Webster University

William Anderson, Faculty (1983)
AUTOMOTIVE
A.A.S., Central Texas College

Richard Basile, Faculty (1981)
LAW ENFORCEMENT
A.A.S., Central Texas College

Audre Binder, Faculty (1986)
LAW ENFORCEMENT
B.A., University of Maryland
M.Ed., Boston University

James Borst, Faculty (1993)
LAW ENFORCEMENT
B.A., Chapman College

Willie L. Bradley, Faculty (1993)
TRANSPORTATION
B.A., Alabama State University

Joseph Brasch, Faculty (1985)
LAW ENFORCEMENT
A.S., Allan Hancock College
B.A., Ventura College of Law

Arturo Cantu, Faculty (1994)
LAW ENFORCEMENT
B.S., Nazareth College

D'Andrea Chatman, Faculty (1992)
LEGAL ASSISTANT
B.A., University of Southern Mississippi
J.D., Southern University

Gretchen Cole-Lade, Faculty (1994)
EARLY CHILDHOOD PROFESSIONS
B.S., Old Dominion University
M.S., Boston University

Clyde Crone, Faculty (1987)
AUTOMOTIVE
A.A.S., Central Texas College

Larry Dart, Faculty (1985)
AUTOMOTIVE
A.A.S., Central Texas College

Albert Decambra, Faculty (1994)

LAW ENFORCEMENT

B.S., Wichita State University

Denis Distefano, Faculty (1992)

LEGAL ASSISTANT

B.A., American University

J.D., American University

Deborah Doherty, Faculty (1993)

EARLY CHILDHOOD PROFESSIONS

B.A., Queens College

M.S., Queens College

Herman Drake, Faculty (1993)

MILITARY SCIENCE

B.A., University of Maryland

Ken Foss, Faculty (1990)

LAW ENFORCEMENT

A.S., San Francisco City College

B.S., University of California

M.P.A., Golden Gate University

Felipe Gonzalez, Faculty (1993)

EMERGENCY MEDICAL TECHNOLOGY

B.A., Claremont Men's College

M.D., University of California, Los Angeles

Joel R. Gonzalez, Faculty (1994)

LEGAL ASSISTANT

B.A., St. Mary's University

J.D., Notre Dame Law School

Billy E. Goodson, Faculty (1993)

LAW ENFORCEMENT

A.A., Hillsborough Community College

B.A., University of South Florida

James Goodwin, Faculty (1991)

EMERGENCY MEDICAL TECHNOLOGY

B.S., University of the State of New York

Fred Grant, Faculty (1994)

MILITARY SCIENCE

B.S., Prairie View College

Shawn Gunder, Faculty (1993)

EMERGENCY MEDICAL TECHNOLOGY

B.S.A.S., The University of Oklahoma

Melissa Haduck, Faculty (1994)

LAW ENFORCEMENT

A.S., East Tennessee State University

B.S., East Tennessee State University

Rosalind Hairston, Faculty (1989)

LAW ENFORCEMENT

B.S., Troy State University

M.S., Troy State University

Vicki L. Hamlin, Faculty (1994)

EARLY CHILDHOOD PROFESSIONS

A.A., University of Maryland

B.G.S., University of Kansas

Gerald Hammer, Faculty (1988)

LAW ENFORCEMENT

B.A., Chapman College

Kimberly Henne, Faculty (1994)

EMERGENCY MEDICAL TECHNOLOGY

B.A., St. Michael's College

Michael Herman, Faculty (1992)

LAW ENFORCEMENT

B.A., Columbia College

Douglas E. Hill, Faculty (1993)

LAW ENFORCEMENT

A.S., Park College

Charles Hills, Faculty (1994)

OFFICE ADMINISTRATION

B.A., University of Maryland

M.A., Boston University

Richard Holman, Faculty (1994)

LAW ENFORCEMENT

A.A.S., North Idaho Junior College

B.S., University of Idaho

M.P.A., University of Idaho

Donna Humphrey, Faculty (1993)

LEGAL ASSISTANT

A.A., McCormac Junior College

B.S., Arizona State University

Becky Isler, Faculty (1994)

EMERGENCY MEDICAL TECHNOLOGY

A.S., Community College of the Air Force

Glenn Jackson, Faculty (1992)

LAW ENFORCEMENT

A.G.S., Central Texas College

David L. Jensen, Faculty (1992)

LAW ENFORCEMENT

A.G.S., Central Texas College

John Karabetsos, Faculty (1993)

LAW ENFORCEMENT

A.A., Community College of the Air Force

B.S., Troy State University

M.P.A., Golden Gate University

Grady Kelly, Faculty (1994)
LAW ENFORCEMENT
B.S., Auburn University
M.S., Troy State University
M.Ed., Troy State University

David Kinsman, Faculty (1994)
AUTOMOTIVE
A.A., University of Maryland

Dale Kraning, Faculty (1994)
AUTOMOTIVE
A.G.S., Central Texas College

Stanley Langley, Faculty (1983)
AUTOMOTIVE
A.A.S., Central Texas College

Nathaniel Laws, Faculty (1977)
AUTOMOTIVE
A.A.S., Central Texas College

Michael A. Lombardi, Faculty (1992)
LAW ENFORCEMENT
A.A., Los Angeles City College

Al Lopez, Faculty (1987)
LAW ENFORCEMENT
A.A.S., Central Texas College
B.S., Cameron University

George Ludwig, Faculty (1994)
COMMUNICATION ELECTRONICS
A.A., University of Maryland

Patricia A. Lumpkin, Faculty (1994)
EARLY CHILDHOOD PROFESSIONS
B.A., University of Florida
M.S., Nova University

Diana Marshall, Faculty (1994)
EARLY CHILDHOOD PROFESSIONS
A.A.S., Thomas Nelson College
B.S., University of Maryland
M.S., Elmira College

Cheryl Mason, Faculty (1994)
LEGAL ASSISTANT
B.A., Ohio North University
J.D., Creighton University

Robert J. Morelan, Faculty (1994)
LAW ENFORCEMENT
B.S., Jacksonville State University

George Mulligan, Faculty (1988)
LAW ENFORCEMENT
B.A., Western Kentucky State College
M.Ed., Boston University

Alan Noah, Faculty (1989)
LAW ENFORCEMENT
A.A., City College of San Diego
M.A., Chapman College
Ph.D., United States International University

Nancy Oesterle, Faculty (1989)
FOOD SERVICE MANAGEMENT
A.G.S., Central Texas College

James L. Park, Faculty (1994)
COMMUNICATION ELECTRONICS
B.S., Kansas State College
M.P.A., Troy State University

Lynne A. Perillo, Faculty (1993)
EARLY CHILDHOOD PROFESSIONS
A.A., University of Maryland
B.S., University of Maryland

Lewis Pillich, Faculty (1994)
FOOD SERVICE MANAGEMENT
B.A., University of Puerto Rico
M.P.A., University of Puerto Rico

Terry L. Porter, Faculty (1994)
LAW ENFORCEMENT
B.A., University of New Mexico

Leslie Pozanek, Faculty (1991)
LAW ENFORCEMENT
B.A., University of Maryland
M.P.A., University of Baltimore

John Pretti, Faculty (1991)
LAW ENFORCEMENT
B.S., University of Nebraska

Lawrence Price, Faculty (1993)
LEGAL ASSISTANT
B.A., University of Miami
J.D., University of Miami

Marvin Reed, Faculty (1994)
LAW ENFORCEMENT
B.A., Eastern Illinois University

Keith Reynolds, Faculty (1993)
FOOD SERVICE
A.A.S., Central Texas College
B.A., Saint Leo College

Guy Rhoads, Faculty (1990)
AUTOMOTIVE
A.A.S., Central Texas College

David Robinson, Faculty (1994)
MILITARY SCIENCE
B.S., University of Colorado at Denver

Margaret E. Ross, Faculty (1994)
EARLY CHILDHOOD PROFESSIONS
B.S., Moorhead State College

Benjamin Russ, Faculty (1991)
MILITARY SCIENCE
B.S., University of Maryland

Joe D. Samuels, Faculty (1992)
HOTEL/MOTEL MANAGEMENT
B.S., Grambling State University

Donald T. Sanders, Faculty (1993)
TRANSPORTATION
B.S., University of Maryland

Marie Schaechter, Faculty (1994)
EMERGENCY MEDICAL TECHNOLOGY
B.S., McGill University
R.N., Boston City Hospital

Janet E. Sellars, Faculty (1994)
LEGAL ASSISTANT
B.S., University of State of New York

Glenn Shaver, Faculty (1994)
AUTOMOTIVE
A.A.S., Navy Community College
B.S., University of Maryland

Wayne Skidmore, Faculty (1994)
OFFICE ADMINISTRATION
B.A., Portland State University
M.Ed., Boston University

Elisabeth Smith, Faculty (1994)
EARLY CHILDHOOD PROFESSIONS
B.Ed., New Mexico State University
M.Ed., Boston University

Leslie Stroud, Faculty (1994)
EMERGENCY MEDICAL TECHNOLOGY
B.S., Salisbury State University
M.Ed., Salisbury State University

Maggie Taylor, Faculty (1994)
EARLY CHILDHOOD PROFESSIONS
A.A., West Los Angeles College
B.A., Bellevue College

David Thomas, Faculty (1992)
LAW ENFORCEMENT
A.A.S., Pikes Peak Community College
B.S., Chapman College

Robert J. Toothman, Faculty (1993)
COMMUNICATION ELECTRONICS
B.S.E.E., University of Missouri
M.S.E.E., Air Force Institute of Technology

John J. Towery, Faculty (1994)
LAW ENFORCEMENT
A.G.S., Central Texas College
B.S., University of Maryland

Brian P. Williams, Faculty (1988)
AUTOMOTIVE
A.A., University of Maryland

Brenda L. Wolff, Faculty (1994)
LEGAL ASSISTANT
A.A., Kent State University
B.B.A., Cleveland State University
J.D., Cleveland State University

Edward Zimmerman, Faculty (1994)
FIRE PROTECTION TECHNOLOGY
A.A.S., Community College of the Air Force

Virginia A. Zukowski, Faculty (1993)
LAW ENFORCEMENT
B.P.A., National University
M.S.F.S., National University

NAVY CAMPUS

Ashley I. Abrahamson, Faculty (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

Christopher Ake, Faculty (1992)
MATHEMATICS/PHILOSOPHY
B.A., University of Michigan
M.A., Princeton University
Ph.D., Princeton University

Robert Aldrich, Faculty (1988)

PHILOSOPHY

B.A., Heidelberg University

M.Div., Union Theological Seminary

M.Ed., University of San Diego

Lloryel (Bill) Antoine, Faculty (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

Barnard Barufaldi, Faculty (1988)

HISTORY/GOVERNMENT

B.S., Holy Cross College

M.A., Vanderbilt University

M.A.T., University of Massachusetts

Donald Beck, Faculty (1993)

BUSINESS/MANAGEMENT

B.S.E.E., Naval Post Graduate School

M.S.B.O.M., Laverne University

Richard Beil, Faculty (1991)

HISTORY/GOVERNMENT/LAW ENFORCEMENT

B.G.S., Chaminade University

M.A., Tarleton State University

Walter C. Benson, Jr., Faculty (1989)

BUSINESS/MANAGEMENT

B.S., Appalachian State University

M.A., Appalachian State University

Brian E. Birdnow, Faculty (1990)

HISTORY

B.A., St. Louis University

M.A., St. Louis University

Ronald Bohuslov, Faculty (1992)

MATHEMATICS

A.A., Fullerton Junior College

B.A., University of California

M.A., University of California

Ed.D., Nova University

David Bradford, Faculty (1992)

ECONOMICS/MANAGEMENT/BUSINESS

B.A., Kenyon College

M.B.A., University of Chicago

Harry W. Brantly, Faculty (1990)

PSYCHOLOGY/SOCIOLOGY/CRIMINAL JUSTICE

M.A., Rollins College

M.S., Criminal Justice; Rollins College

Dan Branscum, Faculty (1993)

MANAGEMENT/PHILOSOPHY/PSYCHOLOGY

B.A., Northern Arizona University

M.A., Salve Regina University

M.A., National University

M.Div., Southwest Baptist Theological Seminary

Charles Brockmann, Faculty (1989)

ENGLISH/FRENCH

B.A., University of North Carolina

M.A., University of North Carolina

Augustus A. Bruno, Faculty (1984)

MICROCOMPUTER TECHNOLOGY/

COMPUTER SCIENCE/WORD PROCESSING

A.A., College of the Sequoias

B.A., Inter American University of Puerto Rico

M.B.A., New Hampshire College

Gilbert E. Bullock, Faculty (1990)

GEOLOGY/PSYCHOLOGY

B.A., University of Wyoming

M.Ed., University of Wyoming

James E. Bush, Faculty (1987)

BUSINESS/MANAGEMENT

M.B.A., University of South Carolina

William J. Capps, Faculty (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, Faculty (1992)

SOCIOLOGY

B.S., Arizona State College

M.A., San Francisco State College

Robert Chase, Faculty (1989)

ENGLISH

B.A., Pepperdine University

M.A., University of Southern California

Richard W. Condon, Faculty (1988)

HISTORY

A.A., Suomi College

M.A., University of Nebraska

Ph.D., University of Minnesota

Ervin Cooper, Faculty (1990)

MANAGEMENT

B.A., University of Missouri

M.A., San Diego State University

Weldon Cox, Faculty (1990)
HISTORY
B.S. Ed., University of Missouri
M.Ed., University of Missouri

Samuel A. Davis, Faculty (1993)
HISTORY/GOVERNMENT
B.S., East Carolina University
M.A., East Carolina University
M.L.S., East Carolina University

Robert Dayton, Faculty (1990)
ENGLISH/SPEECH/PSYCHOLOGY
B.A., Sacramento State College
M.A., Sacramento State College
A.B.D., University of Southern Mississippi

John Doran, Faculty (1988)
ENGLISH/SPEECH
B.A., Rockhurst College
M.A., University of Notre Dame
Ph.D., University of California, Los Angeles

Florante Dulay, Faculty (1993)
PSYCHOLOGY
B.A., San Diego State University
M.S., San Diego State University

Charles Fillercup, Faculty (1988)
COMPUTER SCIENCE/MATHEMATICS
B.Eng., University of Southern California
M.S., University of Southern California
Ph.D., University of Southern California

Billy Finch, Faculty (1989)
MATHEMATICS
B.A., University of Florida
M.A.T., University of Florida

David Fisher, Faculty (1991)
HISTORY
B.A., Baylor University
M.A., Southwest Texas State University

Catherine Fitzmaurice, Faculty (1991)
ENGLISH
B.A., University of California
M.A., University of California

Frank R. Fitzpatrick, Faculty (1989)
BUSINESS/MANAGEMENT
B.S., Roosevelt University
M.S., University of Wisconsin

Thomas Fournier, Faculty (1989)
ENGLISH/LAW ENFORCEMENT/
GOVERNMENT
B.A., University of Florida
M.A., University of Florida
M.A., San Diego State University
J.D., University of Florida

Joseph A. Frangie, Faculty (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, Faculty (1988)
HISTORY
M.S., Northeast Louisiana University

Bernard L. Freese, Faculty (1987)
COMPUTER SCIENCE/BUSINESS/
MANAGEMENT/MATHEMATICS
M.S., University of North Dakota
M.B.A., University of South Dakota

Charles S. Fulcher, Faculty (1989)
SCIENCE
B.S., Virginia Polytech Institute
M.Ed., University of North Carolina

Dana E. Gassaway, Faculty (1994)
HISTORY/PHILOSOPHY
B.S., University of North Alabama
M.A., Southeastern Baptist Theological Seminary

Caroline L. Geer, Faculty (1992)
ENGLISH
B.A., Michigan State University
M.A., North Texas State University
Additional Graduate Study—University of
Texas at Dallas

Michael Gibbons, Faculty (1992)
LAW ENFORCEMENT
A.A., Hartnell College

Kenneth Gibson, Faculty (1993)
GOVERNMENT/HISTORY/MANAGEMENT/
LAW ENFORCEMENT
B.A., University of Texas
M.A., University of Texas

Thomas D. Greenhaw, Faculty (1989)
HISTORY
B.A., Defiance College
M.A., Stetson University
Ph.D., Auburn University

Michael Gregg, Faculty (1988)

MATHEMATICS

B.S., Michigan State University

M.A., University of Michigan

Michael D. Harrah, Faculty (1993)

ENGLISH

B.A., University of Toledo

M.A., University of Toledo

James A. Harrison, Faculty (1987)

ENGLISH

M.A., San Jose State University

Lawrence S. Hartsfield, Faculty (1990)

BUSINESS/MANAGEMENT/ACCOUNTING

B.S., Stetson University

M.B.A., University of North Florida

Gary Hasten, Faculty (1987)

SOCIOLOGY

A.A., Mesa College

B.A., University of California, San Diego

M.A., University of California, San Diego

Jeffrey C. Hewitt, Faculty (1993)

MANAGEMENT

B.A., Hamilton College

M.A., Colgate University

Mark Hickerson, Faculty (1993)

GOVERNMENT/HISTORY

A.A., Mt San Antonio College

B.A., California State University, Fullerton

M.A., California State University, Fullerton

Michael Hill, Faculty (1987)

ENGLISH

B.A., Southern Oregon College

M.A., University of Arizona, Tucson

David M. Hughes, Faculty (1988)

HISTORY

B.A., High Point College

M.S., Southern Connecticut State Univ.

M.Ed., North Carolina Agricultural &
Technical State University

Homer Hungerford, Faculty (1991)

MANAGEMENT/BUSINESS/MATHEMATICS

M.S., Indiana State University

M.B.A., Golden Gate University

Jesse F. Hurley, Faculty (1989)

PSYCHOLOGY/SOCIOLOGY

B.A., University of Chicago

M.A., University of Chicago

Jose G. Irizarry-Jiminez, Faculty (1991)

HISTORY

B.A., University of Puerto Rico

M.Ed., Inter American University of Puerto Rico

Virgil Jardine, Faculty (1993)

**LAW ENFORCEMENT/MANAGEMENT/
BUSINESS/ECONOMICS/GOVERNMENT**

A.A., Diablo Valley College

B.A., California State University

M.A., Golden Gate University

Jimmie H. Johnson, Faculty (1989)

PSYCHOLOGY

B.A., San Jose State College

M.S., San Jose State College

Addison M. Johnston, Faculty (1992)

PSYCHOLOGY

B.A., Clemson University

M.S., Auburn University

Ph.D., Texas Tech University

James Jones, Faculty (1990)

BUSINESS/MANAGEMENT

B.A., Indiana University

M.B.A., San Francisco State University

Kirk B. Kerle, Faculty (1991)

LAW ENFORCEMENT/HISTORY

M.A., Pittsburgh State University

J.D., Washburn University

John B. Ketcham, Faculty (1989)

ENGLISH

M.A., Chico State College

Sam L. King, Faculty (1987)

COMPUTER SCIENCE/MANAGEMENT

B.B.A., Mercer University

E.Ds., West Georgia College

M.Ed., West Georgia College

Alfred E. Klucke, Faculty (1990)

BUSINESS/MANAGEMENT/REAL ESTATE

B.A., New England College

B.S., New England College

M.B.A., Golden Gate College

Kenneth Kurz, Faculty (1991)

HISTORY

B.A., San Francisco State University

M.A., San Francisco State University

John Lackman, Faculty (1989)

MATHEMATICS

B.A., California State University, Long Beach

M.A., Texas A&M University

Ph.D., University of Iowa

Donald Landauer, Faculty (1990)
BUSINESS/MANAGEMENT
B.S., University of California, Berkeley
M.B.A., University of California, Los Angeles

Richard Larkin, Faculty (1989)
MANAGEMENT/PSYCHOLOGY
A.A., College of Marin
B.S., University of San Francisco
M.A., California State University, Rohnert Park

James V. Lee, Faculty (1989)
ENGLISH
B.A., Abilene Christian College
C.L.U., American College
M.Ed., Southwest Texas State University

Leo J. Legendre, Faculty (1993)
HISTORY
B.S., St. John's University
M.S., Siena College

Dale A. Long, Faculty (1987)
GEOLOGY/PSYCHOLOGY/SOCIOLOGY
M.A., Portland State University

Ruth E. Lopez, Faculty (1992)
MICROCOMPUTER TECHNOLOGY/
COMPUTER SCIENCE
A.A.S., Kinsborough Community College
B.B.S., Bernard Baruch
M.A., New York University

Stephen Luche, Faculty (1990)
BUSINESS/GOVERNMENT/HISTORY/
MANAGEMENT
B.B.A., Longwood College
M.A., Old Dominion University

Kimberlee Lusk, Faculty (1994)
ENGLISH
B.A., San Diego State University
M.A., Washington State University

Linda K. Mahoney, Faculty (1991)
MATHEMATICS
M.Ed., University of Maryland

Robert D. Mazur, Faculty (1989)
MATHEMATICS
B.A., University of Florida, Gainesville
M.A.T., University of Florida, Gainesville

Robert J. McCarter, Faculty (1988)
BUSINESS/MANAGEMENT/ACCOUNTING
B.S., Florida State University
M.B.A., Rollins College

Richard F. McLaughlin, Faculty (1990)
PHILOSOPHY/PSYCHOLOGY
B.A., St. Alphonsus College
M.Ed., Mount St. Alphonsus Seminary

Ira J. McRae, Faculty (1987)
BUSINESS/MANAGEMENT
A.A., Southwestern College
B.B.A., Central State University
M.Ed., Central State University

Brendon R. Mermann, Faculty (1993)
MATHEMATICS
B.S., Fairfield University
M.S., Hofstra University

Darlene Milecki, Faculty (1994)
BUSINESS/MANAGEMENT
B.S., University of Southern California
M.I.M., American Graduate School of International Management

Kent A. Mitchell, Faculty (1988)
GOVERNMENT/HISTORY/LAW
ENFORCEMENT/ENGLISH
B.A. Ohio State University
M.A. Ohio State University
J.D., Notre Dame

Nancy Miller, Faculty (1994)
HISTORY
A.A., Pasadena City College
B.A., University of California, Santa Barbara
M.A., San Diego State University

Billie E. Mobley, Faculty (1987)
BUSINESS/MANAGEMENT/COMPUTER
SCIENCE/MICROCOMPUTER TECH.
A.B.M., Tidewater Community College
M.B.A., Old Dominion University

George D. Murdoch, Faculty (1987)
ENGLISH/PSYCHOLOGY/SPEECH
M.Ed., Boston University
M.A. University of Michigan

Joe Nation, Faculty (1993)
SOCIOLOGY
B.S., Indiana University
M.A., New School of Social Research

Claude Newmen, Faculty (1990)
PSYCHOLOGY/SOCIOLOGY
A.A., Phoenix College
B.A., Arizona State University
M.A., Northern Arizona University

Luis F. Olivieri, Faculty (1991)
HISTORY
B.A., University of Puerto Rico
M.A., Florida State University

Nicholas C. Polos, Faculty (1989)
HISTORY
B.A., Pomona College
M.A., Harvard University
Ph.D., University of California, Berkeley

Meredith (Ray) Ponte, Faculty (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, Faculty (1991)
MATHEMATICS
A.S., Wayne Community College
B.S., North Carolina State University
M.S., University of South Carolina

Reagan Ragsdale, Faculty (1987)
ENGLISH
B.A., Samford University
M.A., Samford University

George A. Renn, Faculty (1987)
ENGLISH
M.A., Old Dominion University

Richard L. Rider, Faculty (1988)
ENGLISH/SPEECH
A.B., University of Nebraska
M.F.A., Yale University
Ph.D., University of Illinois

Ismael Rodriguez, Faculty (1991)
LAW ENFORCEMENT/MANAGEMENT
B.S., Wichita State University
M.A., Webster University

James G. Rose, Faculty (1992)
MATHEMATICS/PHYSICS
B.A., Augustana College
M.S., University of Louisville

Paul M. Ryan, Faculty (1987)
BUSINESS/MANAGEMENT/REAL ESTATE/
HISTORY
B.A., Seattle University
M.B.A., National University

Gordon E. Shockley, Sr., Faculty (1988)
REAL ESTATE/BUSINESS/MANAGEMENT
B.S., St. Joseph's College
M.A., East Carolina University

Robert Seiler, Faculty (1990)
LAW ENFORCEMENT
B.S., California State University, Los Angeles
M.P.A., Pepperdine University

Timothy Simon, Faculty (1992)
ENGLISH
B.A. Southeast Missouri State University
M.A., Southeast Missouri State University

Gary Smith, Faculty (1992)
HISTORY
A.A., San Jose City College
B.A., San Jose State University
M.A., San Jose State University

Marilyn S. Stalzer, Faculty (1991)
BIOLOGY
B.A., St. Xavier College
M.A., University of Puerto Rico

Nicholas S. Staresinic, Faculty (1989)
MATHEMATICS/SCIENCE
B.S., University of Pittsburgh
Ph.D., Massachusetts Institute of Technology

Joseph Strang, Faculty (1993)
ENGLISH
B.A., Marist College
M.A., St. John's University

Howard I. Streifford, Faculty (1989)
ENGLISH
B.A., University of California, Berkeley
M.A., San Francisco State University
Ph.D., Southern Illinois University

Anthony G. Talarico, Faculty (1987)
ENGLISH/SPANISH
B.A., Queens College
M.A.T., The Citadel

Linda Taylor, Faculty (1993)
ENGLISH
A.A., Hinds Junior College
B.S., Mississippi College
M.Ed., University of Texas

Samuel S. Taylor, Faculty (1985)
MANAGEMENT/REAL ESTATE/LAW
ENFORCEMENT/HISTORY/GOVERNMENT
A.A., University of Maryland
B.A., Coastal Carolina College
J.D., University of South Carolina

Wallace Taylor, Faculty (1990)
ENGLISH
B.S., Illinois State University
M.A., Eastern Illinois University

Donald Thomas, Faculty (1992)
MATHEMATICS/PHYSICS
B.S.E.E., San Diego State University
M.S.E.E., Syracuse University
Ph.D., Syracuse University

Stephen Thorn, Faculty (1993)
HISTORY
A.A., Grossmont College
B.S., California Polytechnic University
M.A., University of San Diego

Michael Thurman, Faculty (1987)
ENGLISH/HISTORY
B.A., University of Southern California
M.A., University of Southern California
Ph.D., University of Southern California

Paul L. Trittschuh, Faculty (1991)
MATHEMATICS
M.Ed., Wright State University

Arthur K. Van Tassel, Faculty (1989)
ENGLISH
B.A., San Diego State University
M.A., University of Texas, El Paso

Roger L. Vernon, Faculty (1991)
HISTORY
B.E., Chicago Teacher's College
M.A., Northwestern University
Ph.D., Loyola University of Chicago

Margaret C. Ward, Faculty (1991)
ENGLISH
B.A., Wellesley College
Ph.D., Harvard University

John B. Westbury, Faculty (1987)
MATHEMATICS
B.S., University of South Carolina
M.Ed., University of Georgia

Desmond White, Faculty (1987)
BUSINESS/MANAGEMENT
B.A., University of Texas, Austin
M.B.A., University of Houston

Leslie Whitman, Faculty (1989)
BUSINESS
B.A., University of South Florida
M.B.A., National University, San Diego

George Wickens, Faculty (1990)
MATHEMATICS
B.S., University of Detroit
M.A., University of Detroit

Curt Willits, Faculty (1989)
ENGLISH/HISTORY
B.A., Florida State University
M.A., Florida State University
Ph.D., Florida State University

Edward Wilson, Faculty (1994)
COMPUTER SCIENCE
B.S., Massachusetts Institute of Technology
M.S., Massachusetts Institute of Technology

James C. Wood, Faculty (1991)
ENGLISH
B.A., University of Nevada, Reno
M.A.T.E., University of Nevada, Reno

PACIFIC FAR EAST CAMPUS

Merrill G. Andrus, Faculty (1991)
MATHEMATICS
B.A., Brigham Young University
Ph.D., University of Washington

York J. Barrett, Faculty (1989)
MICROCOMPUTER TECHNOLOGY
A.A., Olympic College

Peter J. Behl, Faculty (1992)
MICROCOMPUTER TECHNOLOGY
A.A., Anne Arundel Community College

James A. Bitting, Faculty (1980)
AUTOMOTIVE MAINTENANCE
A.G.S., Central Texas College

Sandra M. Boettcher, Faculty (1992)
EARLY CHILDHOOD PROFESSIONS
B.S., Dr. Martin Luther College

Steven J. Borman, Faculty (1991)
GOVERNMENT
A.A., Suffolk County Community College
B.A., Stony Brook
M.A., University of California-Davis

Ellery Q. Bowser, Faculty (1991)

MANAGEMENT
B.A., Ft. Wright College

Earnest N. Bracey, Faculty (1994)

MANAGEMENT
B.A., Jackson State University
M.P.A., Golden Gate University
M.A., Catholic University
Ph.D., George Mason University

Elvia A. Butler, Faculty (1994)

MICROCOMPUTER TECHNOLOGY
A.A., University of Maryland
A.A., Community College of the Air Force
B.A., University of Maryland

Jeong Ja Chang, Faculty (1990)

MANAGEMENT
B.A., Ewha Womens University
M.B.A., University of Pittsburgh

Soon Joung Chung, Faculty (1989)

FINE ARTS
B.A., Hong-Ik University
M.F.A., University of North Texas

Robert J. Collins, Faculty (1991)

COMPUTER SCIENCE
A.G.S., Central Texas College

Cary Dugan, Faculty (1990)

DATA PROCESSING
A.S., Regents College

Bryn M. Everitt, Faculty (1984)

AUTOMOTIVE
A.A.S., Central Texas College

Calvert M. Fleming, Faculty (1992)

MANAGEMENT
B.A., Chapman University
M.A., Golden Gate University

Frank E. Foster, Faculty (1993)

GOVERNMENT/MANAGEMENT
B.A., Columbia College
M.A., University of Oklahoma

Robert T. Fuentes, Faculty (1985)

MANAGEMENT
A.A., El Paso Community College
B.A./A.A., University State of New York
M.S.W., Our Lady of the Lake Univ.

Robert J. Furse, Faculty (1992)

MANAGEMENT
B.A., University of Maryland

Mary J. Gigax, Faculty (1992)

FINE ARTS/HUMANITIES
B.A., Asbury College
M.E.A., University of Tennessee

Mary R. Glasgow, Faculty (1992)

MANAGEMENT
B.S., Auburn University
M.S., Carnegie Mellon

Norman H. Graves, Faculty (1990)

FOOD SERVICE MANAGEMENT/
HOTEL MOTEL MANAGEMENT
A.A.S., Central Texas College

Phillip W. Gray, Faculty (1990)

BUSINESS/MANAGEMENT
B.A., University of Missouri
M.P.A., Penn. Mil. College (Widener College)

Duane Harden, Faculty (1989)

DATA PROCESSING
A.S., Grossmont College
B.S., San Diego State University

Richard B. Hark, Faculty (1984)

MANAGEMENT
A.A., Leeward Community College
B.A., University of Hawaii
M.A., University of Hawaii

Linda L. Higgins, Faculty (1991)

ENGLISH
B.A., Southern Illinois University
M.A., University of Arizona

David R. Holt, Faculty (1992)

FINE ARTS/HUMANITIES
A.A., Olympic College
B.A., West Washington University
B.F.A., University of Washington
M.F.A., Central Washington University

Hwi Shin Hong, Faculty (1987)

MANAGEMENT/MATHEMATICS
B.A., Ewha University
M.S., Massachusetts College of Pharmacy
Ph.D., Massachusetts College of Pharmacy

Theresa H. Hooper, Faculty (1992)

LEGAL ASSISTANT
B.S., Northeast Missouri State University
J.D., University of Missouri

Michelle Jackson, Faculty (1992)

CRIMINAL JUSTICE
B.A., Appalachian State University
M.A., University of Florida

Thomas W. James, Faculty (1991)
MANAGEMENT
A.A.S., Central Texas College

Lynne C. Jeon, Faculty (1992)
FINE ARTS
B.F.A., Cleveland Institute of Art
M.A., Hong Ik University

Wechool Jung, Faculty (1991)
MICROCOMPUTER TECHNOLOGY
B.S., Busan National University
M.S., State University of New York

Forest Kay, Faculty (1988)
CRIMINAL JUSTICE/GOVERNMENT
B.S., University of Tampa
M.Ed., University of Tampa
D.P.A., Nova University

Gerald D. Keener, Faculty (1992)
MANAGEMENT
B.S., University of New York

Byong S. Kim, Faculty (1989)
MANAGEMENT
B.A., Florida Presby College
Th.M., Princeton University
Ph.D., Emory University

Russell W. Krogh, Faculty (1991)
LAW ENFORCEMENT/MANAGEMENT
A.G.S., Central Texas College

Kenneth E. Kuehn, Faculty (1991)
MICROCOMPUTER TECHNOLOGY
A.A.S., Community College of the Air Force
B.S., Community College of the Air Force

Jeffrey LaRocque, Faculty (1992)
DATA PROCESSING
B.A., University of Maryland

Deborah L. Lee, Faculty (1992)
ART/MUSIC
B.A., Boston University
M.A., Texas Women's University

Erica Linthorst, Faculty (1992)
DEVELOPMENTAL STUDIES
B.A., University of Iowa
M.Ed., University of Rochester

Thane Lundberg, Faculty (1991)
INDUSTRIAL EDUCATION
B.S., San Diego State University

David Lyon, Faculty (1991)
FINE ARTS/HUMANITIES
B.F.A., University of California
M.F.A., University of Tennessee

Albert D. Manning, Faculty (1992)
MANAGEMENT
B.S., University Southern Mississippi
M.Ed., University of Maryland

Darwin V. Maxon, Faculty (1983)
MANAGEMENT
B.A., University of Maryland

James E. Misch, Faculty (1992)
LAW ENFORCEMENT/MANAGEMENT
B.A., St. Mary's College

Peter D. Morrissey, Faculty (1990)
MANAGEMENT
A.A., Kapiolani Community College
B.A., University of Hawaii
B.A., Suny College
M.A., Webster University

Mi A Mun, Faculty (1992)
MICROCOMPUTER TECHNOLOGY
B.S., University of Florida

Kenneth J. Musat, Faculty (1992)
MANAGEMENT/COMPUTER SCIENCE
A.A.S., Northern Virginia Community College
B.A., Wittenberg University

Robert Nelson, Faculty (1990)
DATA PROCESSING
B.S., University of Illinois
M.S., University of West Florida

Kevin E. Newhart, Faculty (1992)
MICROCOMPUTER TECHNOLOGY
B.B.S., Pacific Union College
B.S., Pacific Union College

Donald W. Pennington, Faculty (1992)
LAW ENFORCEMENT
A.S., City Colleges of Chicago

Charles M. Prettyman, Faculty (1991)
COMPUTER SCIENCE
A.A., Los Angeles Community College
B.S., University of Delaware
M.B.A., Sul Ross State University

Timothy E. Prince, Faculty (1993)
MANAGEMENT
B.B.A., Kennesaw State University

Jeffrey E. Radford, *Faculty* (1983)
LAW ENFORCEMENT
A.G.S., Central Texas College
B.S., University of New York

Geraldine B. Rhodes, *Faculty* (1992)
FINE ARTS
A.A., All Saints Jr. College
M.A., Columbia University
B.M.E., Southern Methodist University

Yeon H. Roman, *Faculty* (1990)
MICROCOMPUTER TECHNOLOGY
B.S., University of Maryland

Armando Sanchez, *Faculty* (1990)
MANAGEMENT/GOVERNMENT
B.A., University of Maryland
M.P.A., University of Oklahoma
D.B.A., Western Colorado University

Bernard J. Sheehan, *Faculty* (1986)
MANAGEMENT
B.A., University of Maryland

Danny J. Sherrill, *Faculty* (1992)
MANAGEMENT
A.A., Chabot College
B.A., California State University
M.D.A., Golden Gate University

Brandon M. Stone, *Faculty* (1991)
MICROCOMPUTER TECHNOLOGY
A.A., Central Texas College
B.A., University of Maryland

Mark B. Straughan, *Faculty* (1988)
MANAGEMENT
A.A., Los Angeles Metro College
A.A., Central Texas College
B.S., University of Maryland

Michael W. Swanson, *Faculty* (1987)
MICROCOMPUTER TECHNOLOGY
A.A.S., Central Texas College

Richard E. Thomas, *Faculty* (1987)
OFFICE ADMINISTRATION
B.A., Chapman College
M.B.A., Chapman College

Dennis Vandervort, *Faculty* (1992)
CRIMINAL JUSTICE
B.A., University of Arizona
J.D., University of Arizona
LL.M., George Washington University

Richard L. Vitale, *Faculty* (1988)
MANAGEMENT
B.A., College of Emporia

Robert G. Wahl, *Faculty* (1989)
MANAGEMENT
A.A., Northern Virginia Community College
B.A., Georgia State University
M.S.Ed., University of Southern California
M.A., National University

Ray A. Welsh, *Faculty* (1994)
MANAGEMENT
A.A., Palomar College
B.A., Chaminade University
M.A., Pepperdine University

Thomas M. Wright, *Faculty* (1991)
BUSINESS
B.A., American University
M.S.B.A., Boston University

(NOTE: Figures in parentheses indicate date of first appointment on the College staff and date of appointment to present position, respectively.)

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.

Committed to serving all students, CTC provides comprehensive programs and services for special populations: disability support services, single parent/homemaker support services, and nontraditional career support services as well as tutoring and transportation assistance. To meet the occupational training needs, Central Texas College offers a variety of professional development and job-related skills programs, such as basic literacy skills, leadership skills, foreign language skills and occupational skills programs.

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 evaluation 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. The main office is located on the Central Campus at Killeen, Texas. Programs of study vary with each location and not all programs are available at each location. This *Catalog* provides information concerning the policies, procedures, and programs applicable to branches and extensions 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), Educational Specialist, or Central Texas College representative.

THE CATALOG

The *Catalog* is an official bulletin of Central Texas College containing policies, regulations, procedures, tuition, and fees in effect at the time this *Catalog* was published. The College reserves the right to make changes at any time to reflect current board policies, administrative regulations and procedures, amendments required by state or federal law, and tuition or fee changes.

Students are urged to study the contents of this *Catalog* carefully, as they are responsible for observing the regulations contained herein.

PROGRAM AND COURSE AVAILABILITY

Programs of study displayed in this *Catalog* are offered when sufficient interest indicates a level of enrollment required for program continuation. Students desiring to enter specific programs of study are advised to seek confirmation of program availability prior to their first registration.

The 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 the College are used to handle student grievances. When a student believes a condition or employee of the College is unfair or discriminatory, the student 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 college site.

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. The 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 within their respective units. Students should contact the Assistant to the Dean, Student Life Activities at 817/526-1258, faculty should contact the Deputy Chancellor for Campus Operations at 817/526-1781, and staff should contact the Human Resources Department at 817/526-1157.

ADMISSIONS AND REGISTRATION

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

GENERAL ADMISSION INFORMATION

Requests for application materials or questions concerning admission should be addressed to the Central Texas College personnel at each location.

Central Texas College is a comprehensive community college. An open-door admissions policy is maintained to ensure that all persons who may benefit from postsecondary education have the opportunity to enroll. New students will be admitted to the College providing all admissions requirements are met. Admission to the 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 course work until they have taken and successfully passed a Department of Education independently administered examination. The examination must have been taken within the past year.

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

Admission 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 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 after providing official test scores from a list of approved tests authorized by the Department of Education. *The list may be obtained from a College representative.* **NOTE:** 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 minimum score of 450 on the Test of English as a Foreign Language (TOEFL) in order 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 college placement exam. Students scoring 375 and above are eligible for admission to developmental studies courses.

Overseas Admissions—Special Note: Personnel not sponsored in the overseas command by the U.S. Armed Forces are not normally permitted to attend Central Texas College classes. Applicants may attend classes if local policy permits, but 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.

Admission Requirements—Aviation Science Students

All aviation science students must pass FAA physical exams appropriate to their level of training prior to admission to flight training. Written evidence of FAA medical certification must be presented to the appropriate college official at the time of pre-registration advisement for admission to this department.

Readmission Requirements

Central Texas College students who have not enrolled for two years or more at the College must re-complete the admission process. Students who have attended other institutions during their absence from Central Texas College 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:

1. An Early Admission Form with the signatures of high school principal or counselor and parent or legal guardian must be submitted.
2. Student must provide an official high school transcript.
3. The student will be expected to adhere to all policies of the College and the high school to include attendance.

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

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

RECORDS REQUIRED

Transcripts and Test Scores

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

1. 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.
2. High School Equivalence Graduates: 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.
3. College Transfer Students: Seeking certificates or degrees from Central Texas College must provide official transcripts for all regionally accredited college study before official degree plans are provided.
4. Individual Admissions Students (except transient 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.
5. Texas Academic Skills Program Test Scores: Official copies of TASP Test scores sent directly from NES must be on file for all students requiring TASP testing prior to the accumulation of 9 semester hours of college-level credit.

NOTE: Students are responsible for requesting all official records to be forwarded directly from the issuing institution to the Central Texas College campus serving the student's location. Transcripts must bear original seal or mark and signature of the registrar to be acceptable. 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 a student's former name, without a social security number, Central Texas College cannot be responsible for properly identifying the document. Admission requirements have not been met until records required 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 Veteran Affairs Services. Students who have completed TASP testing must request official TASP scores. Records will be required if student later elects to seek a diploma, 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.

Due to the rapid changes taking place in the technological field today, coursework taken in a major field of study or courses directly related to that 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 College officials when coursework was completed five years or longer before the student entered the Central Texas College program of study.

UNIFORM APPLICATION OF STANDARDS

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

REGISTRATION

Central Texas College normally assigns a representative to each Education Center or College 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 in 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. Students should consult their local schedules for times and dates of registration and classes.

Registration Requirements

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

1. Application for Admission/Class Registration (each registration)
2. Payment of fees and tuition.

NOTE: 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. Individuals should 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 students will be permitted to register after the scheduled late registration ends.

Adding or Dropping Classes

Students wishing to register for additional courses, or change course enrollments after registering, must have the amendments made on the registration card. Such changes must be completed and initialed by the student 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. Installment payment of tuition is not permitted. When a student officially withdraws from a course, that person is not entitled to remain in class on an unofficial basis. Only those students who are officially enrolled have the privilege of attending classes.

TUITION AND FEES

TUITION

Tuition for classes at Central Texas College locations outside the Central Campus in Texas vary with the government contract through which the institution operates. Therefore, both tuition and fees must 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.

Current tuition, fees, and costs of classes can be obtained from the Education Officer, Navy Campus Representative, and the Central Texas College representative.

FEES

Institutional Challenge Examination Fee—A fee of \$50 for each challenge examination should accompany the Application of Examination.

Degree Fee—A fee of \$25 is payable at the time a student applies for a degree or certificate of completion.

Certificate Fee—A fee of \$10 is payable at the time a student applies 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 checks which have been returned for insufficient funds.

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

PAYMENT

Checks or money orders should be made payable to Central Texas College. Central Texas College requires payment of tuition and applicable fees prior to 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:

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 more than 1/8 but 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.

Refunds will be processed by the Director of Administrative Services 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 as of the date of the emergency. Students must submit written proof of emergency such as military emergency leave orders or medical certification of family emergency. Refund 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 plus transportation costs 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 the College 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. Textbooks may be purchased from the Central Texas College representative during the registration period. This period is normally two weeks prior to 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 or by sending a check or money order in the amount of the cost of the textbook plus \$4 for handling and shipping to: Central Texas College, Attn: Book Department. Addresses for the book department serving your area are available from Central Texas College personnel.

STUDENT SERVICES

TRANSCRIPTS

A student's records are considered confidential in nature. Convenient forms for ordering transcripts are available from the Records Office.

The first transcript is issued free of charge. Graduates are provided an information transcript free of charge upon graduation. The fee of \$3 for all other 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.

Request 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 requests will not be honored. It is not acceptable practice to send or receive facsimile (FAX) transcripts.

Requests for transcripts should be addressed to the Overseas Campus Student Services Office for students attending Europe or Pacific Far East Campuses. Students attending all other sites should request their transcript directly from the Transcript Department, Killeen, Texas. Addresses are listed in the front of the *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.

Students departing Central Texas College locations in Europe or the Pacific Far East must notify the administrative office of their departure to ensure their records are transferred to the Systems Office at Killeen, Texas. 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.

Records and transcript services will be provided through the Systems Registrar for all files transferred to the Systems Office from Europe and the Pacific Far East and all other sites. Evaluations and graduation applications will be processed through the Dean of Student Services Office.

The Registrar will deny a student's transcript request if the student has an outstanding obligation to the College. The obligation may be due to a library fine, parking ticket, bad check, non-repayment of financial aid, or failure to comply with admissions requirements.

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

NOTE: 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 Killeen, Texas, Central Campus office.

NOTE: Transcripts may be provided only upon the written request of the student.

EVALUATION OF PREVIOUS EDUCATION

Nontraditional Education

Central Texas College recognizes that each student's educational needs, goals and experiences are unique and that individuals are proficient in many areas of college work that are not formally documented on transcripts. It is the policy of the College to recognize nontraditional 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 nontraditional methods with institutional curricular requirements.

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

The nontraditional methods usually considered applicable toward a degree at Central Texas College are:

1. The Defense Activity for Non-Traditional Educational Support (DANTES) courses and Subject Standardized Tests (see NOTE: on following page).
2. College Level Examination Program (CLEP)—both the General Examination and Subject Examination (see NOTE: on following page).
3. Institutional Course Challenge Examination—Students may request, through the appropriate 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.
4. Credit for military schools completed, as recommended by the American Council on Education (ACE) and recognized by Central Texas College.

5. Credit for military service basic training.
6. Military Job Training and Experience, as recommended by the American Council on Education and recognized by Central Texas College.
7. American College Testing Program—(ACT) (see NOTE: below).
8. College Board Admission Testing Program (see NOTE: below).
9. Correspondence Extension Courses offered by regionally accredited institutions which are members of the National University Extension Association.
10. Other—To include certain types of civilian training, specialized testing, and work experience.

NOTE: 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 nontraditional educational experiences completed in excess of seven years prior to the student's completion of 6 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 nontraditional credits as well as remaining requirements are available from the College, Military Education Centers, or the Navy Campus advisors upon the student's request.

Evaluation and final degree plans are provided upon receipt of all official transcripts and documents. Evaluated credit must be validated through successful completion ("C" or "P" grade or higher) of a minimum of six semester hours of traditional credit earned at Central Texas College. Students on financial or academic hold will not be eligible for evaluation of nontraditional educational experiences until the financial or academic hold is cleared. Validated evaluated credit will be posted to the student's transcript upon request.

Application for a final degree plan may be made by submitting an Evaluation Request form to Evaluations, Central Texas College, at the administrative office serving the student. 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. Students planning to transfer to other institutions should 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) and (SOCNAV) program, 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 nontraditional 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 which minimizes loss of credit, avoids duplication of credit, yet maintains program integrity;
- has established guidelines which 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 the College, regardless of location;
- allows students to satisfy residency requirements with courses taken at the College at any time during their course of study;
- provides the Individualized Career Evaluation Process (ICEP) to access 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 forces; and
- Provides the Individualized Career Evaluation Process (ICEP) which reflects the principles and guidelines set forth in the statement on awarding credit for extra institutional learning and awards credit for nontraditional learning assessment programs.

SOCAD-2/SOCNAV-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 agreements may be issued after the completion of at least 6 semester hours of coursework with a 2.0 GPA or 6 semester hours of "C", "P", or higher at Central Texas College. These should be requested from the Administrative office serving the student's 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, SOCAD-2/SOCNAV-2
P.O. Box 1800
Killeen, TX 76540-9990
800/792-3348, Extension 1374

Students completing certificate/degree requirements utilizing credits from other institutions should contact the above address for approval of specific courses. Please allow sufficient time for the 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. The 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.

- a. 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.

- b. The time frame for students enrolled full-time (enrolled in six or more credit hours) shall be no more than twelve eight-week terms of full-time enrollment to complete a degree program.
- c. Half-time students (enrolled in three to five credit hours) shall have twenty-four 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. Students may refer to their degree plan, college *Catalog*, or see a college representative for further details regarding their 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 students 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 (0-29 credit hours on the student's Central Texas College degree plan) and \$3,500 during the sophomore standing (30-60 hours on the student's Central Texas College degree plan). These are loans obtained by the student from a lending agency outside the college such as a bank, savings and loan association, credit union, etc., which 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 leaving school.

Interested students should obtain detailed information and application forms directly from lending institutions or the appropriate college 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 the college. Each student must have an exit interview regarding their rights, responsibilities, and loan payment scheduling.

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.

Each recipient should make sure that he or she is informed of all conditions on the tuition assistance agreement. 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 Civilians Tuition Assistance

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

One copy of the approved tuition assistance form must be provided to the College at the time of registration.

ACADEMIC POLICIES

ACADEMIC LOAD

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

Half (1/2) time	3 semester hours
Three quarter (3/4) time	5 semester hours
Full (1/1) time	6 semester hours

- 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 prerogative of the Department of Veteran Affairs, not the institution. Questions about VA payments must be sent by the student directly to the VA Office serving the student's 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 that should be taken.

ATTENDANCE POLICY

Class Attendance

Students are required to attend regularly all classes in which they have enrolled. Students are required to be in classrooms 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, the student has the responsibility to arrange to make up assignments missed during the absence.

Students are required to 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:

- A class meeting of 50 minutes equals 1 absence.
- Beginning the first scheduled day of class meeting, instructors are required to keep attendance records.
- An administrative withdrawal may be initiated when the student fails to meet college attendance requirements. The course will be noted as an "FN" on the roll and record book, with a final grade of "F" on the transcript.
- As a matter of policy, excused absences are not provided for any reason by College employees other than instructors. Regardless of the reason for the absence, students are responsible for completing all coursework covered during any absence.

Excessive Absences

Absences from classes for any reason must not exceed College standards. In general, students may be administratively withdrawn from any class with the grade of "F" when their unexcused absences reach a total equal to 12.5% of the class hours for the course. Example: Students attending a 48-hour class during an eight-week period normally meet 180 minutes each session for 16 sessions. Those students accumulating two unexcused absences are subject to Administrative Withdrawal since the total unexcused absences equal 12.5% of class hours for the course. Students attending 96-hour classes are subject to administrative withdrawal after they have accumulated 12 hours of unexcused absences.

OFFICIAL WITHDRAWAL POLICY

Any student who desires to, or must, withdraw from a course after the first scheduled class meeting must file an Application for Withdrawal or an Application for Refund with the instructor. Additionally students must file with the Education Services Officer or Navy Campus Representative. Applications for Withdrawal or an Application for Refund will not be accepted after the close of business on the last working day before the last week of class. Also see previous sections entitled "W"—*Withdrawal and Refunds*.

Students using financial aid, military tuition assistance, VA benefits or other than personal funds may be required to repay tuition and fees to the funding agency. For specific repayment requirements, students are referred to the Student Services office. Military tuition assistance students are referred to 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.

A student may not withdraw from a class for which the instructor has previously issued the student a grade of "F" for non-attendance.

Emergency withdrawal will be considered when documentary evidence is presented. Also see Refunds.

STUDENT CLASSIFICATION

Freshman—with thirty semester hours or less of college-level credit recorded on your permanent record.

Sophomore—with thirty-one semester hours or more of college-level credit recorded on your permanent record.

RESIDENT CREDIT

A student may earn an associate degree entirely through study at campuses outside the State of Texas or in combination with courses at the Texas Campuses. At least 16 semester hours or 25% of degree requirements must be earned by 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**

Taking a Course Out of Sequence

Student who, for scheduling reasons, find it desirable to take an advanced course prior to completing the prerequisite must secure, in writing, approval from the appropriate 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. Students are encouraged to become familiar with each instructor's requirements for grades and class syllabus.

Grades are reported by two methods:

1. 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.
2. Transcripts are provided by the Records Office and are the official report of completed courses, grades, and credit awarded by the 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 may be awarded 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. Notice of absence with supporting documentation may be required by the instructor. Students are requested to notify instructors in advance of absences whenever possible. The instructor makes the final decision concerning the granting of the incomplete grade.

In awarding 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 the responsibility of the student 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 a student elects to repeat the course, the individual must register, pay full tuition and fees, and repeat the entire course.

NOTE: 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 nontraditional, modular courses and will be awarded 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 nontraditional, modular courses and will be awarded 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 nontraditional, modular courses and will be awarded to students who have failed to make satisfactory progress due to failure to attend.

"W"—Withdrawal

Students who officially withdraw will be awarded the grade of "W," provided attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with the 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

Students attending college with military tuition assistance, financial aid, or VA benefits should 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 feel that there has been a computational error 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. Through 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 recomputation of cumulative grade point average.

Student Responsibility to Know GPA

Students are expected to be aware of their grade point average. The method of calculation of grade point average is noted above. Students are encouraged to compute their grade point average frequently. Students are responsible for knowing whether or not they are eligible to continue in the College. An ineligible student who nevertheless registers in the College shall be withdrawn, and the student shall not receive special consideration for the plea of lack of knowledge of scholastic status. Students who receive grades below "C" (2.0) for any course should 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 a student is 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 7 semester hours will be placed on academic probation during the next term in which they register if their cumulative grade point average is less than 2.0. Students who fail to achieve a 2.0 grade point average during any term after the first 7 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 the 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 the College for two consecutive sixteen-week semesters or four eight-week terms.

NOTE: 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 the College on an individual petition basis. Students granted immediate re-entry must:

1. Receive advisement and be recommended, in writing, by the ESO or NCR for return to classes; and
2. 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 to be considered auditing on a full-time basis, nor will permission be granted to *allow small children in class*. Parents must make arrangements for the care of their children during class meetings. College policy does not permit a student to audit courses.

STUDENT RESPONSIBILITIES

ADDRESS CHANGES

All correspondence from Central Texas College to the student will be mailed to the address provided on the Application for Admission. Any address changes must be made in writing to the C&I Records Office. Students are responsible for all communication mailed to the last address on file. Student academic file will be maintained in Europe or the Pacific Far East for five years after the 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 as it is the name that will appear on their official student record. To change a legal name to a new legal name, the student must submit a copy of the signed court order showing the authorized new legal name. To change a last name after marriage, the student must present a copy of the marriage certificate. 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, Killeen, Texas.

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 College records or who knowingly submit any falsified records to the College are subject to disciplinary action which may include suspension or expulsion from the College.

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:

1. Plagiarism—The taking of passages from the writing of others without giving proper credit to the sources.
2. 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.
3. 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

Students are admitted to Central Texas College for the purpose of educational, social, and personal enhancement. As students they 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, students 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 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 College owned facility or at any College 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.

Those individuals seeking further information should 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, students are expected to maintain a mature, earnest and interested attitude in the classroom. The College will not tolerate student behavior which disrupts the class or which 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, the 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 the 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 the 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.

Further information concerning disciplinary procedures may be requested from Central Texas College personnel.

CERTIFICATE 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 listed below 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 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 the College are designed to provide a means for students to remove specific deficiencies or provide refresher coursework prior to 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 requirement is 25% or 12 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 the detailed information concerning coursework transfer. This *Catalog* should be used by students as the basis for course planning. Courses taken in Developmental Studies will not satisfy degree requirements at the receiving institution.

DEGREE REQUIREMENTS

Associate In Arts Degree

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

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

Associate In Science Degree

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

1. Twelve semester hours of communications to include a, b and c:
 - a. ENGL 1301 and 1302,
 - b. Three semester hours of ENGL 2311, 2322, 2323, 2327, 2328, 2332, or 2333,
 - c. Three semester hours of speech;
2. Three semester hours of humanities or fine arts (see page 28);
3. HIST 1301 and 1302;
4. GOVT 2301 and 2302;

5. Twelve semester hours of laboratory science (I and II sequence);
6. A minimum of three semester hours of computer instruction (see page 28);
7. Six semester hours of mathematics, MATH 1314 or higher;
8. Four semester hours of physical education from activity courses;
9. A minimum of 25 percent semester hours of credit earned within the Central Texas College System;
10. All required courses in the major as listed in the college *Catalog*;
11. Satisfy a, b, and c:
 - a. A minimum overall grade point average of 2.0 ("C" average),
 - b. A minimum of "C" on each course in the major,
 - c. A minimum of 2.0 ("C") with Central Texas College; and
12. Meeting all other 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 College official.

Associate In General Studies Degree

Students planning to attend a senior college should coordinate with that senior college to ensure that the courses they take at Central Texas College will fulfill graduation requirements there. To receive an Associate in General Studies degree students must complete a minimum of 64 semester hours which must include:

1. Communications to include either a or b:
 - a. ENGL 1301 and three semester hours of oral communications,
 - b. ENGL 1312;
2. Three semester hours of humanities or fine arts (see page 28);
3. Three semester hours of mathematics, MATH 1314 or higher;
4. HIST 1301 and 1302;
5. GOVT 2301 and 2302;
6. Three semester hours of computer instruction (see page 28);
7. Two semester hours of physical education from activity courses;
8. If the major is commercial art, all required courses in the major as listed in the College *Catalog* must be completed;
9. A minimum of 25 percent of semester hours credit earned within the Central Texas College System;
10. A minimum of overall grade point of 2.0 ("C" average), to include a minimum 2.0 ("C" average) on all courses taken with Central Texas College;
11. Meeting all other College and departmental requirements; and
12. 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 College official.

Associate In Applied Science Degree

Students must complete the specific degree requirements in the degree plan for their major field as shown in the program of study. The degrees consist of a minimum of 64 semester hours and will include:

1. Communications to include either a or b:
 - a. ENGL 1301 and three semester hours of oral communications,
 - b. ENGL 1312;
2. Three semester hours of humanities or fine arts (see page 28);
3. Three semester hours of mathematics, MATH 1314 or higher, except for the Associate Degree Nursing program;
4. Three semester hours of social or behavioral science (see page 28);
5. Three semester hours of computer instruction (see page 298);
6. A minimum of 36 semester hours of technical courses in the major or a closely related field;
7. A minimum of 25 percent of semester hours credit earned within the Central Texas College System;
8. All required courses in the major as listed in the college *Catalog*;
9. Satisfy a, b, and c:
 - a. A minimum overall grade point average 2.0 ("C" average),
 - b. A minimum of "C" on each course in the major,
 - c. A minimum of 2.0 ("C") with Central Texas College;
10. Meeting all other College and departmental requirements; and
11. 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.

NOTE: 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. Requests for Certificate and Requests for Degree, with appropriate non-refundable fees, must be submitted to the Counseling Office by:

	DEADLINE
Fall Semester for December Graduation	October 1st
Spring Semester for May Graduation	February 1st
Summer Semester for August Graduation	June 10th

All College entrance and course requirements must be completed prior to a certificate or degree award. Request for Certificate or Request for Degree 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 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 file by the above listed graduation deadlines will be processed in the next degree order time frame. No student will be denied a graduation appointment. The graduation date on the certificate or degree must conform to the dates listed above.

Students applying for graduation who do not complete remaining degree requirements on or about the graduation date will be declared non-graduates 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 fee.

Certificates Conferred

Since the duties of military personnel normally prohibit them from full-time student status, the College provides indicators of progress toward the associate degree in the form of certificates. The College presents the Certificate of Award at two levels, 15 hours and 30 hours, to indicate skills obtained by the student through coursework 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 Request For Replacement may be obtained. An appropriate fee is required to replace a certificate or degree.

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:

1. 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 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.
2. 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.
3. Public recognition for graduating with honors or highest honors is conferred only when the student participates in the formal commencement ceremony.
4. 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. Course descriptions for all courses offered are listed in numerical order, alphabetically by program.

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

PROGRAM AND COURSE AVAILABILITY

Courses are offered to students at military installations which have sufficient student interest. However, not all courses are available every term due to the specialized nature of the course content, equipment requirements, and faculty availability.

Student need and interest are major factors in scheduling course sequences. Students should express their requirement to the local ESO or NCR. This will assist in scheduling courses which will aid the majority of students pursuing a program of study. The Central Texas College representative can furnish convenient planning brochures for most programs.

PREREQUISITE COURSES

Students should be familiar with the course descriptions. If the course description indicates a prerequisite, the prerequisite should be met prior to registering for the advanced 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.

Students who cannot schedule prerequisites must obtain prior approval to enroll in these courses from the appropriate College official. Failure to obtain approval could result in loss of credit toward the degree.

SEMESTER CREDIT HOURS

One semester hour of credit represents one hour of lecture class time or usually two-three hours of laboratory class time per week for 16 weeks. Lecture and lab proportions may vary depending on the nature of the course. The relationship of lecture and lab is included, in parentheses, with each course description. For example, (3-0) for a three-semester-hour course means there are three lecture hours per week for one 16-week semester and no lab hours required; (2-4) means there are two lecture hours and four lab hours per week for the same 16-week semester. This weekly requirement will be adjusted as necessary to compensate for terms/sessions/semesters with lengths other than 16 weeks for instance, (3-0) for an eight week term would require six hours of lecture per week and (2-4) 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 which, 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 a 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

<u>ANTH</u>	<u>2351</u>	Cultural Anthropology
ARTS	(all ARTS courses except ARTS 2313, 2314)	
DANC	2304	Dance Appreciation
DRAM	2366	Motion Picture Art
Foreign Language courses		
<u>GEOG</u>	<u>1302</u>	Cultural Geography
<u>GEOG</u>	<u>1303</u>	World Regional Geography
<u>HIST</u>	<u>2311 and 2312</u> 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)		
<u>SPCH</u>	<u>2341</u>	Performance of Literature

Social/Behavioral Science Electives

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

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

ACCOUNTING TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
ACTE	1301	Principles of Accounting I	3	ACTE	1302	Principles of Accounting II	3
BUSI	1301	Introduction to Business	3	ELCT*		Elective	3
MATH	1342	Elementary Statistics	3	MGMT	1305	Introduction to Management	3
ENGL	1301	Composition and Rhetoric I	3	MGMT	1309	Income Tax	3
COSC	1300	Computer Information Processing		SPCH	1321	Business and Professional Speaking	3
or				PHED		Physical Education	1
MISC	1450	Microcomputers for Business	3-4				
PHED		Physical Education	1				
			16-17				16

Second Year

First Semester				Credit	Second Semester				Credit
ACTE	2309	Fundamentals of Accounting III		3	ACTE	2310	Fundamentals of Accounting IV		3
MGMT	2305	Business Law I		3	MGMT	2306	Business Law II		3
ACTE	2305	Basics of Managerial Accounting		3	ACTE**		Elective		3
ACTE	2311	Accounting and Financial Information Systems I		3	<u>ENGL</u>	<u>2311</u>	Technical Writing		3
ELCT†		Humanities/Fine Arts Selection		3	ELCT††		Social/Behavioral Science Selection		3
PHED		Physical Education		1	PHED		Physical Education		1
				16					16
					Total Hours				64-65

* Electives: ECON 2301, 2302; FIBA 2306; MGMT 1304, 1306, 1307, 2301, 2302; OADM 1309, or 2307.

** Accounting Electives: ACTE 2306 and 2312.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

ADMINISTRATIVE SECRETARIAL

Associate in Applied Science Degree

First Year

First Semester		Credit	Second Semester		Credit
OADM*	1301 Beginning Shorthand	3	WOPO*	1304 Intermediate Info. Proc. Applications	3
WOPO*	1303 Beginning Keyboarding/ Data Entry	3	OADM*	1302 Intermediate Shorthand	3
OADM	1305 Records Management	3	OADM	1306 Office Procedures and Applications	3
OADM	1309 Business Mathematics and Calculating Machines	3	OADM	1308 Business Correspondence	3
ENGL	English Selection	3	WOPO	1307 Word Processing/Transcript	3
WOPO	1101 MS-DOS: An Introduction	1	PHED	Physical Education	1
		16			16

Second Year

First Semester		Credit	Second Semester		Credit
MATH	<u>MATH 1314, 1324, or 1342</u>	3	WOPO	2303 Office Automation	3
WOPO	2302 Advanced Information Processing Applications	3	OADM	2305 Office Accounting II	3
OADM	2304 Office Accounting I	3	OADM	2307 Automated Office Management	3
ELCT**	Elective	3	SPCH	<u>SPCH 1315 or 1321</u>	3
ELCT**	OADM/WOPO/MISC Selection	3-4	ELCT†	Humanities/Fine Arts Selection	3
		15-16	ELCT††	Social/Behavioral Science Selection	3
					18
			Total Hours		65-66

* 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.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

AIR CONDITIONING & REFRIGERATION

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
AIRC	1400	Basic Air Conditioning & Refrigeration Theory	4	AIRC	1406	Electricity for Air Conditioning & Refrig. II	4
AIRC	1401	Electricity for Air Conditioning & Refrigeration I	4	AIRC	1407	Mechanical Refrigeration Systems	4
AIRC	1403	Heating Systems	4	ELCT†††		Computer Science/Micro-computer Tech. Selec.	3
MATH		MATH 1314 or higher	3	ENGL	<u>1312</u>	Communications Skills	3
PHED		Physical Education	1	GOVT	<u>2301</u>	State & Federal Government I	
				or			
				GOVT	<u>2302</u>	State & Federal Government II	3
			16				17

Second Year

First Semester			Credit	Second Semester			Credit
AIRC	2400	Electricity for Air Conditioning & Refrigeration III	4	AIRC	2402	Commercial Refrigeration	4
AIRC	2401	Advanced Air Conditioning & Refrigeration Theory	4	AIRC	2404	Troubleshooting Air Conditioning & Refrig. Sys.	4
AIRC	2405	Heat Pumps I	4	ELCT†		Humanities/Fine Arts	3
AIRC	2403	Commercial Air Conditioning Systems	4	AIRC	2407	Heat Pumps II	4
			16	SPCH	<u>1321</u>	Business & Professional Speaking	3
							18
						Total Hours	67

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

APPLIED MANAGEMENT

Associate in Applied Science Degree

First Year

First Semester		Credit	Second Semester		Credit
BUSI	<u>1301</u> Introduction to Business	3	ECON	<u>1303</u> Consumer Economics	3
ENGL*	English Selection(s)	3	ENGL*	English Selection(s)	3
MATH	<u>MATH 1314</u> or higher	3	MGMT**	Management Selection(s)	3
MGMT	1305 Introduction to Management	3	SPCH*	Speech Selection(s)	3
MGMT	1306 Human Relations	3	ELCT†††	Computer Science/Micro-computer Tech. Selection	3
PHED	Physical Education	1	PHED	Physical Education	1
		16			16

Second Year

First Semester			Credit	Second Semester			Credit
ACCT**	2301	Principles of Accounting I	3	ELCT††		Social/Behavioral Science Selection	3
MGMT	2302	Human Resource Management	3				
MGMT	2309	Supervision	3	MGMT	2303	Law and Legal Assistance	3
ELCT†		Humanities/Fine Arts Selection	3	MGMT	2310	Personnel Counseling	3
MGMT**		Management Selection(s)	3	MGMT**		Sophomore Management Selection(s)	3
PHED		Physical Education	1	MGMT**		Sophomore Management Selection(s)	3
			16	PHED		Physical Education	1
							16
						Total Hours	64

* 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; BUSI 1307; COSC 1300, 1403, 1405; OADM 1308, 2307; PSYC 2301; REAE 1301, 2304, or 2305

*** ACCT 2301 may be substituted with OADM 2304 or HMMG 2304.

**** MGMT 2303 may be substituted with 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.

Underlined numbers are common course numbers. See page 16.

APPLIED MANAGEMENT WITH TECHNICAL OPTION COMPUTER APPLICATIONS

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
MGMT	1305	Introduction to Management	3	MGMT	1301	Organization & Management	3
MISC	1400	Microcomputer Fundamentals	4	MGMT	1304	Work Organization	3
MISC	1450	Microcomputers for Business	4	MISC	1430	Spreadsheets for Microcomputers	4
<u>ENGL</u>	<u>1312</u>	Communications Skills	3	MISC	1440	Data Base for Microcomputers	4
MATH		<u>MATH 1324 or 1342</u>	3	<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
PHED		Physical Education	1	PHED		Physical Education	1
			18				18

Second Year

First Semester				Credit	Second Semester				Credit
MGMT	2305	Business Law I		3	MGMT	1306	Human Relations		3
MGMT	2302	Human Resource Management		3	ELCT*		Computer/Microcomputer		
ACCT	2301	Principles of Accounting I		3			Elective		4
MISC	1461	Operating Systems		4	ACCT	2302	Principles of Accounting II		3
MISC	2402	Systems in the MIS			ELCT†		Humanities/Fine Arts		
		Environment		4			Selection		3
					ELCT††		Social/Behavioral Science		
							Selection		3
				17					16
					Total Hours				69

* Any MISC or COSC course for which prerequisites are completed.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

ART

Associate in Arts Degree

(This is a suggested curriculum. See page 23 for degree requirements.)

First Year

First Semester		Credit	Second Semester		Credit
ARTS	Two courses from <u>ARTS 1303, 1311, 1316, or 2323</u>	6	ARTS	Two courses from <u>ARTS 1304, 1312, 1317, and 2324</u>	6
ENGL	<u>1301</u> Composition and Rhetoric I	3	ENGL	<u>1302</u> Composition and Rhetoric II	3
HIST	<u>1301</u> History of the U.S. to 1877	3	HIST	<u>1302</u> History of the U.S. from 1877	3
LANG*	<u>1411</u> Beginning Foreign Language	4	LANG*	<u>1412</u> Foreign Language	4
PHED	Physical Education	1	PHED	Physical Education	1
		17			17

Second Year

First Semester		Credit	Second Semester		Credit
ARTS	One course, sophomore level	3	ARTS	One course, sophomore level	3
ELCT	<u>ENGL 2322, 2323, 2327, 2328, or 2332</u>	3	ELCT	<u>SPCH 1318, 1321, or 2341</u>	3
ELCT	Natural Science Elective	3	ELCT	Natural Science Elective	3
MATH	<u>MATH 1314</u> or higher	3	ELCT†††	Computer Science/Micro-computer Tech. Selec.	4
GOVT	<u>2301</u> State & Federal Government I	3	GOVT	<u>2302</u> State & Federal Government II	3
PHED	Physical Education	1	PHED	Physical Education	1
		16			17
					Total Hours
					67

Students should check the catalog of the institution to which they plan to transfer for particular art courses.

- * 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.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

AUTOMOTIVE BODY REPAIR

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
INDU	1400	Industrial Fundamentals	4	ATBR	1408	Roughing and Alignment II	4
ATBR	1403	Roughing and Alignment I	4	ATBR	1409	Auto Body Welding II	4
ATBR	1405	Auto Body Welding I	4	ATBR	1410	Auto Body Painting Fundamentals	4
ATBR	1407	Auto Body Fundamentals	4	ATBR	1411	Automotive Glass	4
ELCT		Free Elective	1	MATH		<u>MATH 1314</u> or higher	3
			17				19

Second Year

First Semester			Credit	Second Semester			Credit
ELCT†		Humanities/Fine Arts Selection	3	ATBR	2400	Major Vehicle Damage Repair	4
ATBR	2406	Frame Repair and Alignment	4	ATBR	2404	Advanced Auto Body Painting	4
AUTO	2405	Steering & Suspension Systems	4	ELCT†††		Computer Science/Micro-computer Tech. Selec.	4
ENGL	1312	Communications Skills	3	SPCH	1321	Business and Professional Speaking	3
GOVT	2301	State & Federal Government I		ATBR	2401	Panel Repair & Replacement	4
or							
GOVT	2302	State & Federal Government II	3				
			17				19
							72
Total Hours							72

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

AUTOMOTIVE SERVICE AND REPAIR

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
AUTO	1400	Shop Fundamentals	4	AUTO	1411	Automotive Computer Systems	4
AUTO	1301	Automotive Systems	3	AUTO	1405	Automotive Air Conditioning	4
AUTO	1402	Basic Electrical and Test Equipment	4	AUTO	1407	Brake Systems	4
MATH	<u>1314</u>	MATH 1314 or higher	3	AUTO	1408	Standard Transmissions & Transaxles	4
SPCH	<u>1321</u>	Business and Professional Speaking	3	ENGL	<u>1312</u>	Communications Skills	3
			17				19

Second Year

First Semester			Credit	Second Semester			Credit
AUTO	2404	Ignition, Starting, & Charging	4	AUTO	2403	Automatic Transmissions &	
AUTO	2405	Steering & Suspension Systems	4			Transaxles	4
ELCT†††		Computer Science/Micro-computer Tech. Selection	3	AUTO	2406	Engine Diagnosis &	
						Emission	4
AUTO	2410	Fuel Systems & Injection	4	ELCT		Elective	3
<u>GOVT</u>	<u>2301</u>	State & Federal Government I		ELCT†		Humanities/Fine Arts Selection	3
or							
<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3	AUTO	2408	Advanced Engine Service	4
			18				
							18
Total Hours							72

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

AVIATION MAINTENANCE TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester				Credit	Second Semester				Credit
AVMT	1201	Maintenance Publications-G		2	AVMT	1203	Aircraft Drafting-G		2
AVMT	1202	Weight and Balance-G		2	AVMT	1204	Airframe Materials and Corrosion Controls-G		2
AVMT	1305	Basic Aircraft Electricity-G		3	AVMT	1306	Aircraft Finishes-A		3
<u>ENGL</u>	<u>1312</u>	Communications Skills		3	AVMT	1402	Sheet Metal Structures-A		4
<u>PHYS</u>	<u>1305</u>	Survey of Physics		3	AVMT	2303	Airframe Inspection-A		3
					MATH		<u>MATH 1314</u> or higher		3
				13					17

Summer Semester				Credit
AVMT	2304	Aircraft Fuel Systems-A		3
AVMT	2402	Hydraulics and Pneumatics-A		4
				7

Second Year

First Semester				Credit	Second Semester				Credit
AVMT	2305	Aircraft Instrument Systems-A		3	AVMT	2404	Powerplant Maintenance Reciprocating Engines-P		4
AVMT	2306	Engine Electrical Systems-P		3	AVMT	2405	Engine Fuel Systems-P		4
AVMT	2307	Engine Lubrication and Cooling Systems-P		3	AVMT	2406	Aircraft Propellers-P		4
AVMT	2403	Aircraft Electrical Systems-A		4	AVMT	2407	Powerplant Maintenance Turbine Engines-P		4
				13					16

Summer Semester				Credit
ELCT†		Humanities/Fine Arts Selection		3
ELCT††		Social/Behavioral Science Selection		3
				6

Total Hours 72

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

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

AVIATION SCIENCE

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
ASCI	1200	Flight - Basic	2	ASCI	1201	Flight - Private	2
ASCI	1301	Aircraft Science	3	ASCI	1306	Meteorology	3
ASCI	1403	Air Navigation	4	ENGL	1302	Composition and Rhetoric II	3
ENGL	1301	Composition and Rhetoric I	3	SPCH	1315	Public Speaking	3
MATH	1314	College Algebra	3	ELCT**		Approved Elective	3
PHED		Physical Education	1	PHED		Physical Education	1
			16				15

Summer Semester			Credit
ASCI	1204	Flight - Intermediate	2
ASCI	1305	Advanced Air Navigation	3
ASCI	2318	Propulsion Systems	3
			8

Second Year

First Semester			Credit	Second Semester			Credit
ASCI	2204	Flight - Instrument	2	ASCI	2205	Flight Commercial	2
ASCI	2301	Aerodynamics	3	ASCI	2300	Commercial Ground School	3
ASCI	2407	Instrument Ground School	4	ASCI	2303	Air Transportation	3
PHYS	1305	Survey of Physics	3	ELCT††	Social/Behavioral Science		
ELCT†	Humanities/Fine Arts				Selection		3
	Selection		3	ELCT††††	Microcomputer Selection		4
			15				15
							Total Hours
							69

ASCI 2210 and 2211 are substitutes for ASCI 2204 and 2205 for Rotary Wing Transition Students.

** Business or Management Elective

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: (Geography preferred) See page 28.

†††† Microcomputer Selections: MISC 1450 or 1451.

Underlined numbers are common course numbers. See page 16.

BIOLOGY

Associate in Science Degree

(This is a suggested curriculum. See pages 23-24 for degree requirements)

First Year

First Semester			Credit	Second Semester			Credit
<u>BIOL</u>	<u>1408</u>	General Biology I	4	<u>BIOL</u>	<u>1409</u>	General Biology II	
<u>CHEM</u>	<u>1411</u>	General Chemistry I	4		or		
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	<u>BIOL</u>	<u>1411</u>	General Botany	4
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3	<u>CHEM</u>	<u>1412</u>	General Chemistry II	4
<u>MATH</u>	<u>1314</u>	College Algebra	3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>PHED</u>		Physical Education	1	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
				<u>MATH</u>	<u>1316</u>	Trigonometry	3
				<u>PHED</u>		Physical Education	1
			18				18

Second Year

First Semester			Credit	Second Semester			Credit
<u>BIOL</u>	<u>2428</u>	Vertebrate Zoology	4	<u>BIOL</u>	<u>1424</u>	Plant Taxonomy	4
<u>CHEM</u>	<u>2423</u>	Organic Chemistry I	4	<u>CHEM</u>	<u>2425</u>	Organic Chemistry II	4
<u>COSC</u>	<u>1403</u>	Intro to Computer Science and Programming	4	<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3
<u>ENGL</u>	<u>2311</u>	Technical Writing	3	<u>ELCT</u> †		Humanities/Fine Arts Selection	3
<u>GOVT</u>	<u>2301</u>	State & Federal Government I	3	<u>SPCH</u>	<u>1315</u>	Public Speaking	3
<u>PHED</u>		Physical Education	1	<u>PHED</u>		Physical Education	1
			19				18
						Total Hours	73

Students should check requirements of the institution to which they intend to transfer as requirements may vary.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

BUSINESS ADMINISTRATION

Associate in Arts Degree

(This is a suggested curriculum. See page 23 for degree requirements.)

First Year

First Semester		Credit	Second Semester		Credit
SCIE	Biology, Chemistry, Physics, or Geology	4	SCIE	Biology, Chemistry, Physics, or Geology	4
HIST	<u>1301</u> History of the U.S. to 1877	3	HIST	<u>1302</u> History of the U.S. from 1877	3
ENGL	<u>1301</u> Composition and Rhetoric I	3	ENGL	<u>1302</u> Composition and Rhetoric II	3
MATH*	<u>MATH 1314</u> or higher	3	BUSI	<u>1301</u> Introduction to Business	
PSYC	<u>2301</u> Introduction to Psychology	3	or		
PHED	Physical Education	1	MGMT	1305 Introduction to Management	3
			ELCT†	Humanities/Fine Arts Selection	3
			PHED	Physical Education	1
		17			17

Second Year

First Semester		Credit	Second Semester		Credit
ECON	<u>2301</u> Macroeconomics	3	ACCT	<u>2302</u> Principles of Accounting II	3
ACCT	<u>2301</u> Principles of Accounting I	3	ELCT†††	Computer Science/Micro-computer Tech. Selection	4
ENGL**	English Selection	3	GOVT	<u>2302</u> State & Federal Government II	3
GOVT	<u>2301</u> State & Federal Government I	3	ECON	<u>2302</u> Microeconomics	3
ELCT***	Approved Elective	3	SPCH	<u>SPCH 1315</u> or <u>1321</u>	3
PHED	Physical Education	1	PHED	Physical Education	1
		16			17
			Total Hours		67

* Since senior college math requirements vary widely, it is the student's responsibility to consult with the four-year institution he/she is planning to attend.

** English courses include ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

*** Business, Management, Office Administration, Social Science, or other related electives must be approved by the Business Management Department Chair.

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

BUSINESS MANAGEMENT

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
MGMT	1306	Human Relations	3	MGMT	1304	Work Organization	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	MGMK	1308	Small Business Management	3
MATH		<u>MATH 1314, 1324, or 1342</u>	3	OADM	1309	Business Mathematics and Calculating Machines	3
ELCT		<u>BUSI 1301 or MGMT 1305</u>	3	MISC	1450	Microcomputers for Business	4
SPCH		<u>SPCH 1315 or 1321</u>	3	ELCT		Elective	3
PHED		Physical Education	1	PHED		Physical Education	1
			16				17

Second Year

First Semester			Credit	Second Semester			Credit
ELCT		MGMK 1401 or MGMT 2316	3-4	ELCT		MGMK 1402 or MGMT 2317	3-4
MGMT		MGMT 2305 or 2306	3	MGMT	2309	Supervision	3
MGMT	2302	Human Resource Management	3	<u>ECON</u>	<u>2302</u>	Microeconomics	3
<u>ECON</u>	<u>2301</u>	Macroeconomics	3	<u>ACCT*</u>	<u>2302</u>	Principles of Accounting II	3
<u>ACCT*</u>	<u>2301</u>	Principles of Accounting I	3	ELCT†		Humanities/Fine Arts Selection	3
			15-16	ELCT		Elective	1
							16-17
							64-66

* OADM 2304 and 2305 may be substituted.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

CHEMISTRY

Associate in Science Degree

(This is a suggested curriculum. See pages 23-24 for degree requirements.)

First Year

First Semester			Credit	Second Semester			Credit
<u>CHEM</u>	<u>1411</u>	General Chemistry I	4	<u>CHEM</u>	<u>1412</u>	General Chemistry II	4
<u>MATH*</u>	<u>1316</u>	Trigonometry	3	<u>MATH</u>	<u>1348</u>	Analytic Geometry	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3	<u>MISC</u>	<u>1450</u>	Microcomputers for Business	4
<u>PHED</u>		Physical Education	1	<u>PHED</u>		Physical Education	1
			17				18

Second Year

First Semester				Credit	Second Semester				Credit
CHEM	2423	Organic Chemistry I		4	CHEM	2425	Organic Chemistry II		4
MATH	2313	Calculus I		3	PHYS	2426	Modern Physics II		4
GOVT	2301	State & Federal Government I		3	GOVT	2302	State & Federal Government II		3
ENGL	2311	Technical Writing		3	ELCT†		Humanities/Fine Arts Selection		3
PHYS	2425	Modern Physics		4					
PHED		Physical Education		1	MATH	2314	Calculus II		3
					PHED		Physical Education		1
				18					18
					Total Hours				71

Students should check requirements of the institution to which they intend to transfer as requirements may vary.

- * Students deficient in mathematics must take college algebra. This course should be taken during the summer term prior to the freshman year.
- † Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

COMMUNICATIONS ELECTRONICS TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
CMET	1400	Electronics and Computer Skills	4	CMET	1403	Computer Systems & Operational Programming	4
CMET	1401	Digital Circuits	4	<u>MATH</u>	<u>1314</u>	College Algebra	3
ELTE	1401	Electrical Circuits I	4	ELTE	1402	Electrical Circuits II	4
CMET	1402	Computer Systems	4	ELTE	1403	Solid State Electronics	4
				<u>ENGL</u>	<u>1312</u>	Communications Skills	3
			16				18

Second Year

First Semester			Credit	Second Semester			Credit
CMET	1409	CRT Systems	4	ELTE	2407	Communications Circuits II	4
ELTE	1404	Communications Circuits I	4	ELTE	2412	Circuits and Systems	4
ELTE	2406	Integrated Devices	4	ELCT†		Humanities/Fine Arts Selection	3
ELCT††		Social/Behavioral Science Selection	3	CMET	2408	Digital Communications	4
ELCT*		Approved Technical Elective	4	ELCT**		Academic Elective	3
			19				18
				Total Hours			71

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

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

† Humanities/Fine Arts Selection: See page 28.

†† Social Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

COMPUTER ELECTRONICS TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
CMET	1400	Electronics and Computer Skills	4	CMET	1403	Computer Systems & Operational Programming	4
CMET	1401	Digital Circuits	4	<u>MATH</u>	<u>1314</u>	College Algebra	3
ELTE	1401	Electrical Circuits I	4	ELTE	1402	Electrical Circuits II	4
CMET	1402	Computer Systems	4	ELTE	1403	Solid State Electronics	4
				<u>ENGL</u>	<u>1312</u>	Communications Skills	3
			16				18

Second Year

First Semester			Credit	Second Semester			Credit
CMET	1409	CRT Systems	4	CMET	2404	Computer System: Diagnosis & Maintenance	4
CMET	2402	Computer Circuit Analysis	4	ELTE	2412	Circuits and Systems	4
CMET	1405	LAN	4	ELCT†		Humanities/Fine Arts Selection	3
ELTE	2406	Integrated Devices	4	ELCT**		Approved Technical Elective	4
ELCT††		Social/Behavioral Science Selection	3	ELCT***		Academic Elective	3
			19				18
						Total Hours	71

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

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

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

COMPUTER SCIENCE BUSINESS PROGRAMMER/ANALYST

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
COSC	1403	Introduction to Computer Science & Programming	4	COSC	1404	COBOL Programming	4
COSC	1405	Computer Concepts & Analysis	4	COSC	1406	Computer Organization & Architecture	4
ENGL	<u>1301</u>	Composition & Rhetoric I	3	MISC	1461	Operating Systems	4
MATH		<u>MATH 1314</u> or higher	3	ELCT**		COSC/MISC Technical Elective	4
PHED		Physical Education	1				
			15				16

Second Year

First Semester				Credit	Second Semester				Credit
COSC	2403	Operating Systems & Job Control Language		4	COSC	2401	Advanced COBOL		4
COSC	2404	Machine Language Operations		4	MISC	2456	C Language Programming I		4
ELCT**		COSC/MISC Technical Elective		4	ELCT		COSC Sophomore-level Technical Elective		4
ELCT*		ACCT Elective Selection		3	<u>SPCH</u>	<u>1321</u>	Business & Professional Speaking		3
ELCT††		Social/Behavioral Science Selection		3	ELCT†		Humanities/Fine Arts Selection		3
				18					18

* ACCT Elective Selection includes WOPO 2304; OADM 2304; and ACCT 2301.

** COSC/MISC Technical Elective Selection includes COSC 1409, 2494, and MISC 2460.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

COMPUTER SCIENCE INFORMATION TECHNOLOGY OPTION

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
COSC	1401	Computer Operations	4	MISC	1400	Microcomputer Fundamentals	4
MISC	1420	Word Processing for Microcomputers	4	MISC	1440	Data Base for Microcomputers	4
MISC	1430	Spreadsheets for Microcomputers	4	MISC	1460	Desk Top Publishing	4
MISC	1450	Microcomputers for Business	4	MISC	1461	Operating Systems	4
PHED		Physical Education	1				
			17				16

Second Year

First Semester			Credit	Second Semester			Credit
COSC	2490	Computer Resource Management	4	COSC	2409	Field Projects	4
MISC	2454	Data Communications & Networking	4	ELCT		COSC/MISC Technical Elective	4
ELCT*		ACCT Elective Selection	3	MATH		<u>MATH 1314</u> or higher	3
<u>ENGL</u>	<u>1301</u>	Composition & Rhetoric I	3	ELCT††		Social/Behavioral Science Selection	3
ELCT†		Humanities/Fine Arts Selection	3	<u>SPCH</u>	<u>1321</u>	Business & Professional Speaking	3
			17				17
						Total Hours	67

* ACCT Elective Selections include WOPO 2304; OADM 2304; and ACCT 2301.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

CONSUMER ELECTRONICS TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
CMET*	1400	Electronics & Computer Skills	4	CMET	1403	Computer Systems & Operational Programming	4
CMET	1401	Digital Circuits	4				
<u>MATH</u>	<u>1314</u>	College Algebra	3	<u>MATH</u>	<u>1316</u>	Trigonometry	3
ELTE	1401	Electrical Circuits I	4	ELTE	1402	Electrical Circuits II	4
ENGL	1312	Communications Skills	3	ELTE	1403	Solid State Electronics	4
				ELCT†		Humanities/Fine Arts Selection	3
			18				18

Second Year

First Semester			Credit	Second Semester			Credit
CMET	1409	CRT Systems	4	COES	2409	Advanced TV Servicing	4
COES	2408	CATV & Audio Distribution Systems	4	ELTE	2103	Individualized Research	1
ELTE	2406	Integrated Devices	4	ELTE	2303	Special Intensive Study	
ELCT††		Social/Behavioral Science Selection	3	ELTE	2409	Electronic Systems Troubleshooting	4
			15	ELCT**		Computer Maintenance Electronics	4
							16
						Total Hours	67

* Student may substitute ELTE 1303.

** Selected course must be approved by department chair: ELTE 2301, 2402, 2405, 2408, CMET 2408.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

CRIMINAL JUSTICE

Associate in Applied Science Degree

First Year

First Semester		Credit	Second Semester		Credit
CRIJ	1301 Introduction to Criminal Justice	3	CRIJ	1201 Defensive Tactics	2
CRIJ	1304 The Courts and Criminal Procedures	3	CRIJ*	Criminal Justice Option (three courses)	9
CRIJ	1307 Crime in America	3	ENGL	<u>ENGL 1302 or 2311</u>	3
CRIJ	1308 Fundamentals of Criminal Law	3	ELCT	Criminal Justice Elective	3
ENGL	1301 Composition and Rhetoric I	3			
PHED	1130 Physical Conditioning	1			
		16			17

Second Year

First Semester		Credit	Second Semester		Credit
CRIJ	2101 Emergency Medical Aid	1	CRIJ	2201 Firearms	2
CRIJ	2304 Juvenile Procedures	3	PSYC	2301 Introduction to Psychology	3
<u>GOVT</u>	<u>2301</u> State & Federal Government I		<u>SPCH</u>	<u>1321</u> Business and Professional Speaking	3
or			ELCT†	Humanities/Fine Arts Selection	3
<u>GOVT</u>	<u>2302</u> State & Federal Government II	3	ELCT†††	Computer Science/Micro-computer Tech. Selection	3
<u>SOCI</u>	<u>1301</u> Introduction to Sociology	3	ELCT	Elective	3
MATH	<u>MATH 1314</u> or higher	3			
PHED	Physical Education	1			
ELCT	Criminal Justice Elective	3			
		17			17
				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, or 1303.

Students intending to major in Corrections may take CRIJ 1306, 1314, and (1302, 1303, or 1309).

Students who prefer a more general Criminal Justice curriculum may take any three from CRIJ 1302, 1303, 1306, 1309, or 1314.

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

DIESEL MECHANICS

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
INDU	1400	Industrial Fundamentals	4	DIEM	1404	Standard Power Trans	4
DIEM	1301	Diesel Engine Fundamentals	3	DIEM	1406	Diesel Starting and Charging Systems	4
DIEM	1405	Diesel Engine Auxiliary Systems	4	AUTO	1407	Brake Systems	4
<u>ENGL</u>	<u>1312</u>	Communication Skills	3	MATH	<u>MATH 1314</u> or higher		3
ELCT†††		Computer Science/Micro-computer Tech. Selection	3	<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
			17				18

Second Year

First Semester			Credit	Second Semester			Credit
DIEM	2400	Hydraulic Systems Fundamentals and Service	4	DIEM	2404	Automatic Power Train	4
DIEM	2406	Diesel Fuel Injection Systems	4	AUTO	2405	Steering and Suspension Systems	4
DIEM	2407	Diesel Cylinder Head Service	4	DIEM	2405	Advanced Diesel Engine Service	4
ELCT		Elective	3	DIEM	2403	Diesel Engine Overhaul	4
ELCT†		Humanities/Fine Arts Selection	3	<u>GOVT</u>	<u>2301</u>	State & Federal Government I	
			18	or			
				<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3
							19
				Total Hours			72

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

DRAFTING AND DESIGN

COMPUTER-AIDED DRAFTING (CAD)

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
ENGR*	1304	Engineering Graphics	3	ENGR*	1305	Descriptive Geometry	3
DRDS	1402	Technical Illustration	4	DRDS	1403	Machine Drawing	4
DRDS	1404	Structural Drafting	4	DRDS	1410	Computer-Aided Drafting I	4
TMTH	1301	Technical Mathematics	3	<u>ENGL</u>	<u>1312</u>	Communications Skills	3
				ELCT		Elective	3
			14				17

Second Year

First Semester			Credit	Second Semester			Credit
DRDS	2402	Architectural Drafting	4	DRDS	2401	Pipe Drafting	4
DRDS	2403	Electronic Drafting	4	DRDS	2405	Civil Design Drafting	4
DRDS	2411	Computer-Aided Drafting II	4	DRDS	2406	Industrial Practice	4
ELCT**		Approved Elective	3-4	ELCT††		Social/Behavioral Science Selection	3-4
ELCT†		Humanities/Fine Arts Selection	3				
			18-19				15-16
						Total Hours	64-66

* Selected locations may substitute DRDS 1405 for ENGR 1304 and DRDS 1406 for ENGR 1305.

** Approved Electives: DRDS 1303, 1400, 2404, 2406; 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.

DRAFTING AND DESIGN

GRAPHIC ART TECHNOLOGY OPTION

Certificate of Completion

First Semester			Credit	Second Semester			Credit
GART	1401	Elementary Design	4	GART	1405	Production Art II	4
GART	1402	Introduction to Desk Top Publishing	4	GART	1406	Graphic Design I	4
GART	1403	Production Art I	4	GART	1407	Typographic Design	4
GART	1404	Advanced Desk Top Publishing	4	GART	1408	Graphic Design II	4
			16				16
						Total Hours	32

Underlined numbers are common course numbers. See page 16.

EARLY CHILDHOOD PROFESSIONS

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
CHDV	1301	Fundamentals of Early Childhood Education	3	CHDV	1305	Instructional Aids	3
CHDV	1303	Curriculum Resources	3	CHDV	1310	Growth and Development of Children	3
CHDV	1309	Child Guidance and Group Management	3	CHDV	1324	Safety, Health, and Nutrition	3
ENGL	1301	Composition and Rhetoric I	3	CHDV	1327	Families & Communities in Multicultural World	3
CHDV	2303	Managing Child Care Centers	3	CHDV	1406	Learning Environments I	4
			15				16

Second Year

First Semester			Credit	Second Semester			Credit
CHDV	1408	Learning Environments II	4	CHDV	2101	Early Childhood Professions (Seminar)	1
CHDV	2301	The Child with Special Needs	3	CHDV	2305	Advanced Math and Science for Early Childhood	3
ELCT†††		Computer Science/Micro-computer Tech. Selection	3-4	CHDV	2402	Special Projects	4
ELCT		<u>SPCH 1315 or 1321</u>	3	CHDV	2409	Learning Environments III	4
MATH		<u>MATH 1314</u> or higher	3	ELCT†		Humanities/Fine Arts Selection	3
			16-17	ELCT††		Social/Behavioral Science Selection	3
							18
				Total Hours			65-66

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

EDUCATION

Associate in Arts Degree

(This is a suggested curriculum. See page 23 for degree requirements.)

First Year

First Semester				Credit	Second Semester				Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I		3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II		3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877		3	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877		3
SCIE*		Biology, Chemistry, Physics, or Geology		4	SCIE*		Biology, Chemistry, Physics, or Geology		4
<u>LANG</u>	<u>1411</u>	Beginning French I, German I, or Spanish I		4	<u>LANG**</u>	<u>1412</u>	Beginning French II, German II, or Spanish II		4
ELCT*		Elective		3	<u>SPCH</u>	<u>1315</u>	Public Speaking		3
PHED		Physical Education		1	PHED		Physical Education		1
				18					18

Second Year

First Semester			Credit	Second Semester			Credit
ENGL***		English Selection(s)	3	ENGL***		English Selection(s)	3
GOVT	2301	State & Federal Government I	3	GOVT	2302	State & Federal Government II	3
MATH		MATH 1314 or higher	3	ELCT†††		Computer Science/Micro.	
PSYC	2301	Introduction to Psychology	3			computer Tech. Selection	3
SOCI	1301	Introduction to Sociology	3	ELCT*		Elective	3
PHED		Physical Education	1	ELCT*		Elective	3
			16	PHED		Physical Education	1
							16
						Total Hours	68

* Students should check requirements of the institution to which they intend to transfer as requirements may vary. Students should choose electives that will support their major.

** If German taken first year, Beginning French or Spanish may be taken second semester.

*** English Selection(s) include: ENGL 2322, 2323, 2327, 2328, 2332, or 2333.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

EMERGENCY MEDICAL TECHNICIAN

Certificate of Completion

First Semester			Credit		
EMET	1502	Emergency Medical Technician-Ambulance			
or					
EMET	1403	Emergency Medical Technician-Recertification	4-5		
ELCT*		Approved Electives	11		
			15-16	Total Hours	15-16

* Approved Electives: EMET 1302, 1303, 1304, 1305, 2101, 2301, 2302, and 2303.
For this certificate, only six hours will be accepted as evaluated credit.

EMERGENCY MEDICAL TECHNICIAN

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
EMET	1502	Emergency Medical Technician-Ambulance	5	MGMT	1306	Human Relations	3
ENGL	1301	Composition and Rhetoric I	3	EMET	1302	Military Medicine	3
MGMT	1305	Introduction to Management	3	ELCT†††		Computer Science/Micro-computer Tech. Selection	3
MATH		MATH 1314 or 1324	3	ELCT†		Humanities/Fine Arts Selection	3
PHED		Physical Education	1	ELCT*		Approved Elective	3
			15	PHED		Physical Education	1
							16

Second Year

First Semester			Credit	Second Semester			Credit
EMET	2101	Introduction to Paramedic	1	EMET	2302	Emergency Medical Center Management	3
EMET	2301	Disaster Planning	3	EMET	2303	Psychology of Emergencies	3
ACCT**	2301	Principles of Accounting I	3	ENGL	2311	Technical Writing	3
MGMT	2302	Human Resource Management	3	ACCT**	2302	Principles of Accounting II	3
MGMT	2309	Supervision	3	ELCT††		Social/Behavioral Science Selection	3
SPCH		SPCH 1315 or 1321	3	ELCT*		Approved Elective	3
			16				18
						Total Hours	65

* Approved Electives: EMET 1303, 1304, 1305, 1403; PSYC 2301, MGMT 1301, or BIOL 2401. Non-military students may select an EMET elective.

** 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.

Underlined numbers are common course numbers. See page 16.

ENGINEERING

Associate in Science Degree

(This is a suggested curriculum. See pages 23-24 for degree requirements.)

First Year

First Semester			Credit	Second Semester			Credit
<u>ENGR</u>	<u>1304</u>	Engineering Graphics	3	<u>ENGR</u>	<u>1305</u>	Descriptive Geometry	3
<u>MATH</u>	<u>1348</u>	Analytic Geometry	3	<u>MATH</u>	<u>2314</u>	Calculus II	3
<u>MATH</u>	<u>2313</u>	Calculus I	3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	<u>SCIE**</u>		Biology, Chemistry, Physics, or Geology	4
<u>SCIE**</u>		Biology, Chemistry, Physics, or Geology	4	<u>PHED</u>		Physical Education	1
<u>PHED</u>		Physical Education	1	<u>COSC/MISC</u>		COSC 1403 or MISC 1451	4
			17				18

Second Year

First Semester			Credit	Second Semester			Credit
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>ENGL*</u>		English Elective	3	<u>SPCH</u>	<u>SPCH 1315 or 1321</u>		3
<u>GOVT</u>	<u>2301</u>	State & Federal Government I	3	<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3
<u>ELCT†</u>		Humanities/Fine Arts Selection	3	<u>PHYS</u>	<u>2426</u>	Modern Physics II	4
<u>PHYS</u>	<u>2425</u>	Modern Physics I	4	<u>ELCT</u>		Elective	3
<u>PHED</u>		Physical Education	1	<u>PHED</u>		Physical Education	1
			17				17
						Total Hours	69

* English Electives include: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

** Students should check requirements of the institution to which they intend to transfer, as requirements may vary.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

ENGLISH

Associate in Arts

(This is a suggested curriculum. See page 23 for degree requirements.)

First Year

First Semester			Credit	Second Semester			Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>MATH</u>	<u>1314</u>	College Algebra	3	<u>MATH</u>	<u>1316</u>	Trigonometry	3
<u>LANG**</u>	<u>1411</u>	Beginning French I, German I, or Spanish I	4	<u>LANG**</u>	<u>1412</u>	Beginning French II, German II or Spanish II	4
SCIE**		Biology, Chemistry, Physics, or Geology	4	SCIE**		Biology, Chemistry, Physics or Geology	4
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
PHED		Physical Education	1	PHED		Physical Education	1
			18				18

Second Year

First Semester			Credit	Second Semester			Credit
<u>ENGL*</u>		English Elective	3	<u>ENGL*</u>		English Elective	3
<u>LANG**</u>	<u>2311</u>	Intermediate French I, German I, or Spanish I	3	<u>LANG**</u>	<u>2312</u>	Intermediate French II, German II or Spanish II	3
<u>SPCH</u>	<u>1315</u>	Public Speaking	3	<u>MISC</u>	<u>1450</u>	Microcomputers for Business	4
<u>GOVT</u>	<u>2301</u>	State & Federal Government I	3	<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3
<u>ELCT†</u>		Humanities/Fine Arts Selection	3	<u>ELCT</u>		Elective	3
PHED		Physical Education	1	<u>PHED</u>		Physical Education	1
			16				17
				Total Hours			69

* English Electives include: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

** Students should check requirements of the institution to which they intend to transfer, as requirements may vary.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

FINANCE AND BANKING

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
ENGL	<u>1301</u>	Composition and Rhetoric I	3	FIBA	1301	Banking Principles	3
MATH		<u>MATH 1314, 1324 or 1342</u>	3	FIBA	1302	Money and Banking	3
SPCH		<u>SPCH 1315 or 1321</u>	3	FIBA	1305	Law and Banking Principles	3
ELCT		<u>BUSI 1301</u> or MGMK 1311	3	MISC	1450	Microcomputers for Business	4
ELCT		MGMT 1304 or MGMT 1306	3	ELCT		FIBA Elective	3
PHED		Physical Education	1	PHED		Physical Education	1
			16				17

Second Year

First Semester			Credit	Second Semester			Credit
FIBA	2303	Marketing for Bankers	3	FIBA	2304	Consumer Lending	3
<u>ACCT*</u>	<u>2301</u>	Principles of Accounting I	3	<u>ACCT*</u>	<u>2302</u>	Principles of Accounting II	3
MGMT		MGMT 2305 or 2306	3	ECON		<u>ECON 2301 or 2302</u>	3
ELCT		FIBA 1401 or MGMT 2316	4-3	ELCT		FIBA 1402 or MGMT 2317	4-3
ELCT		FIBA/REAE Elective	3	ELCT†		Humanities/Fine Arts Selection	3
ELCT		Elective	3				15-16
			18-19				Total Hours
							66-68

* ACCT 2301 and 2302 may be substituted with OADM 2304 and 2305.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

FIRE PROTECTION TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester	Credit	Second Semester	Credit
FPRT 1301 Fundamentals of Fire Protection	3	FPRT 1302 Fire Prevention	3
FPRT 1303 Fire Protection Systems	3	FPRT 1305 Fire Administration II	3
FPRT 1304 Fire Administration I	3	FPRT 1308 Fire Service Chemistry II	3
FPRT* 1307 Fire Service Chemistry I	3	MATH <u>1314</u> or higher	3
ENGL <u>1301</u> Composition and Rhetoric I	3	SPCH <u>1315</u> Public Speaking	3
PHED Physical Education	1	PHED Physical Education	1
	16		16

Second Year

First Semester	Credit	Second Semester	Credit
FPRT 2301 Industrial Fire Protection I	3	FPRT 2302 Industrial Fire Protection II	3
FPRT 2303 Hazardous Material I	3	FPRT 2306 Fire and Arson Investigation	3
FPRT 2305 Building Codes & Construction	3	FPRT 2404 Fire Fighting Tactics and Strategies	4
ELCT† Humanities/Fine Arts Selection	3	ELCT††† Computer Science/Micro-computer Tech. Selection	3
<u>GOVT</u> <u>2301</u> State & Federal Government I		FPRT** Elective	3
or			
<u>GOVT</u> <u>2302</u> State & Federal Government II	3		
<u>ENGL</u> <u>2311</u> Technical Writing	3		
	18		
		Total Hours	66

* CHEM 1406 may be substituted for FPRT 1307.

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

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

FOOD SERVICE MANAGEMENT

Associate in Applied Science

First Year

First Semester			Credit	Second Semester			Credit
FSMG	1302	Nutrition	3	FSMG	1301	Supervising Kitchen Administration	3
FSMG	1303	Sanitation and Safety	3	FSMG	1305	Food Purchasing	3
FSMG	1401	Food Preparation & Serving	4	FSMG	1306	Menu Planning	3
MGMT	1306	Human Relations	3	<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	ELCT*		Elective	3-4
				<u>SPCH</u>	<u>1315</u>	Public Speaking	3
			16				18-19

Second Year

First Semester			Credit	Second Semester			Credit
FSMG	2304	Hospitality Industry/Sales Promotion	3	HMMG	2304	Financial Management	3
FSMG***	2405	Management Practice I	4	FSMG***	2406	Management Practice II	4
HMMG	2301	Hospitality Industry Law	3	ELCT**		ACCT/OADM/MATH	3-4
MISC	1450	Microcomputers for Business	4	ELCT†		Humanities/Fine Arts Selection	3
ELCT		Elective	3-4	ELCT††		Social/Behavioral Science Selection	3
			17-18				16-17
						Total Hours	67-70

* Elective Selections include: FSMG 1300, 1304, 1307, 1308, 2150, 2151, 2201, 2250, 2251, 2252, 2353, 2355, 2356, 2401, 2402, 2452, or 2453; ACCT 2301, 2302; HMMG, 1300, 1302, 1303, 1305, 1308, 2306; MGMT 1305, 1308, 2101, 2164, 2302, 2304, 2310; ENGL 1302, 1313, or 2311

** Elective Selections include: OADM 1309, 2304; ACCT 2301; or MATH 1314 or higher (excluding 1342).

*** Selected locations may substitute MGMT 1304 and FSMG 2303 for FSMG 2405 and 2406.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

FOREIGN LANGUAGE

Associate in Arts Degree

(This is a suggested curriculum. See page 23 for degree requirements.)

First Year

First Semester			Credit	Second Semester			Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>LANG</u>	<u>1411</u>	Beginning French I, German I, or Spanish I	4	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>MATH</u>		<u>MATH 1314</u> or higher	3	<u>LANG</u>	<u>1412</u>	Beginning French II, German II, or Spanish II	4
<u>HIST</u>	<u>1301</u>	History of the U.S to 1877	3	<u>ELCT</u> †		Humanities/Fine Arts Selection	3
<u>SCIE</u> *		Biology, Chemistry, Physics, or Geology	4	<u>SCIE</u> *		Biology, Chemistry, Physics, or Geology	4
<u>PHED</u>		Physical Education	1	<u>PHED</u>		Physical Education	1
			18				18

Second Year

First Semester			Credit	Second Semester			Credit
ENGL**		English Selection	3	ENGL**		English Selection	3
LANG	2311	Intermediate French I, German I, or Spanish I	3	LANG	2312	Intermediate French II, German II, or Spanish II	3
GOVT	2301	State & Federal Government I	3	GOVT	2302	State & Federal Government II	3
SPCH	1315	Public Speaking	3	MISC	1450	Microcomputers for Business	4
LANG*		Second Language	4	LANG*		Second Language	4
PHED		Physical Education	1	PHED		Physical Education	1
			17				18
							Total Hours
							71

* Students should check requirements of the institution to which they intend to transfer as requirements may vary.

** English Electives include: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

GENERAL STUDIES

Associate in General Studies Degree

(This is a suggested curriculum. See page 24 for degree requirements.)

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

First Year

First Semester		Credit	Second Semester		Credit
<u>ENGL</u>	<u>1301</u> Composition and Rhetoric I		SPCH*	SPCH Selection	
or			or		
<u>ENGL</u>	<u>1312</u> Communications Skills	3	ELCT**	Elective	3
<u>HIST</u>	<u>1301</u> History of the U.S. to 1877	3	<u>HIST</u>	<u>1302</u> History of the U.S. from 1877	3
<u>PHED</u>	Physical Education	1	<u>MATH</u>	<u>MATH 1314</u> or higher	3
ELCT**	Electives	9	ELCT**	Electives	4
			ELCT†††	Computer Science/Micro-computer Tech. Selection	3
		16			16

Second Year

First Semester		Credit	Second Semester		Credit
<u>GOVT</u>	<u>2301</u> State & Federal Government I	3	<u>GOVT</u>	<u>2302</u> State & Federal Government II	3
ELCT**	Electives	12	ELCT†	Humanities/Fine Arts Selection	3
<u>PHED</u>	Physical Education	1	ELCT**	Electives	10
		16			16
			Total Hours		64

* 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.

Underlined numbers are common course numbers. See page 16.

GEOLOGY

Associate in Science Degree

(This is a suggested curriculum. See pages 23-24 for degree requirements.)

First Year

First Semester				Credit	Second Semester				Credit
<u>GEOL</u>	<u>1403</u>	Physical Geology		4	<u>GEOL</u>	<u>1404</u>	Historical Geology		4
<u>MATH*</u>	<u>1316</u>	Trigonometry		3	<u>MATH</u>	<u>1348</u>	Analytic Geometry		3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877		3	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877		3
<u>CHEM</u>	<u>1411</u>	General Chemistry I		4	<u>CHEM</u>	<u>1412</u>	General Chemistry II		4
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I		3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II		3
<u>PHED</u>		Physical Education		1	<u>PHED</u>		Physical Education		1
				18					18

Second Year

First Semester			Credit	Second Semester			Credit
PHYS	1401	College Physics I	4	PHYS	1402	College Physics II	4
GOVT	2301	State & Federal Government I	3	GOVT	2302	State & Federal Government II	3
MATH	2313	Calculus I	3	MATH	2314	Calculus II	3
ENGL**		English Elective	3	SPCH	1315	Public Speaking	3
PHED		Physical Education	1	PHED		Physical Education	1
COSC	1403	Introduction to Computer Science & Programming	4	ELCT†		Humanities/Fine Arts Selection	3
			18				17
				Total Hours			71

Students should check requirements of the institution to which they intend to transfer, as requirements may vary.

* 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, and 2333.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

HOTEL/MOTEL MANAGEMENT

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
HMMG		HMMG 1302 or 1307	3	HMMG	1300	Food and Beverage Management	3
MGMT	1306	Human Relations	3	HMMG	1303	Front Office Procedures	3
FSMG	1401	Food Preparation and Serving	4	FSMG	1301	Supervising Kitchen Administration	3
ENGL	<u>1301</u>	Composition and Rhetoric I	3	FSMG	1303	Sanitation and Safety	3
MATH	<u>1342</u>	Elementary Statistics	3	FSMG	1305	Food Purchasing	3
ELCT**		Elective	3-4	ELCT		Elective	3
			19-20				18

Second Year

First Semester			Credit	Second Semester			Credit
HMMG***	2401	Hotel/Motel Internship I	4	HMMG	2301	Hospitality Industry Law	3
FSMG	2304	Hospitality Industry Sales Promotion	3	HMMG	2304	Financial Management	3
ELCT†		Humanities/Fine Arts Selection	3	ELCT*		ACCT/OADM/MATH	3-4
MISC	1450	Microcomputers for Business	4	HMMG***	2402	Hotel/Motel Internship II	4
SPCH		<u>SPCH 1315 or 1321</u>	3	ELCT††		Social/Behavioral Science Selection	3
			17				16-17
				Total Hours			70-72

Students pursuing emphasis in specific areas must take the corresponding electives listed below:

Emphasis	Electives
Front Office Procedures	HMMG 1306
Marketing and Sales Promotion	HMMG 1306 and HMMG 2307
Food and Beverage Management	HMMG 2308
Housekeeping	HMMG 2302
Engineering and Facilities Management	HMMG 2305 and 2302

* ACCT/OADM/MATH Elective Selection includes: ACCT 2301; OADM 1309, 2304; MATH 1314 or higher (excluding 1342).

** Elective Selection includes: HMMG 1305, 1306, 1308, 2302, 2305, 2306, 2307, 2308; FSMG 1300, 1302, 1304, 1306, 1307, 1308, 2303, 2306, 2401, 2402; MGMT 1305 or 1308; ENGL 1302, 1313, 2311

*** Selected locations may substitute any HMMG/FSMG elective.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

KINESIOLOGY

(PHYSICAL EDUCATION)

Associate in Science Degree

(This is a suggested curriculum. See pages 23-24 for degree requirements.)

First Year

First Semester		Credit	Second Semester		Credit
<u>ENGL</u>	<u>1301</u> Composition and Rhetoric I	3	<u>ENGL</u>	<u>1302</u> Composition & Rhetoric II	3
<u>BIOL</u>	<u>1408</u> General Biology I	4	<u>BIOL</u>	<u>1409</u> General Biology II	4
<u>HIST</u>	<u>1301</u> History of the U.S. to 1877	3	<u>HIST</u>	<u>1302</u> History of the U.S. from 1877	3
<u>MATH</u>	<u>MATH 1314</u> or higher	3	<u>MATH</u>	<u>MATH 1314</u> or higher	3
<u>PHED</u>	<u>1301</u> Foundations of Physical Health	3	<u>COSC</u>	<u>1300</u> Computer Information Processing	3
<u>PHED</u>	Physical Education (Team Sport)	1	<u>PHED</u>	Physical Education (Indiv. Sport)	1
		17			17

Second Year

First Semester			Credit	Second Semester			Credit
ENGL*		English Selection	3	ENGL*		English Selection	3
BIOL	2401	Human Anatomy	4	BIOL	2402	Human Physiology	4
GOVT	2301	State & Federal Government I	3	GOVT	2302	State & Federal Government II	3
PHED	1308	Sport Officiating	3	PHED	1306	Safety and First Aid	3
SPCH**		Speech Selection	3	SOCI	1301	Introduction to Sociology	3
PHED	1130	Physical Conditioning	1	PHED	1138	Rhythmic Aerobics	1
			17				17
Total Hours							68

* English Selection: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

** Speech Selection: SPCH 1321 and 1318.

Underlined numbers are common course numbers. See page 16.

LAW ENFORCEMENT

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
LAWE	1301	Introduction to Criminal Justice	3	LAWE	1201	Defensive Tactics	2
LAWE	1304	The Courts and Criminal Procedures	3	LAWE*		Law Enforcement Option Elective	3
LAWE	1307	Crime in America	3	LAWE*		Law Enforcement Option Elective	3
LAWE	1308	Fundamentals of Criminal Law	3	LAWE*		Law Enforcement Option Elective	3
ENGL	<u>1301</u>	Composition and Rhetoric I	3	LAWE*		Law Enforcement Option Elective	3
PHED		Physical Education	1	ENGL	<u>ENGL 1302 or 2311</u>		3
				ELCT**	Law Enforcement Elective		3
			16				17

Second Year

First Semester			Credit	Second Semester			Credit
LAWE	2101	Emergency Medical Aid	1	LAWE	2201	Firearms	2
LAWE	2304	Juvenile Procedures	3	PSYC	<u>2301</u>	Introduction to Psychology	3
GOVT	<u>2301</u>	State & Federal Government I or		SPCH	<u>1321</u>	Business and Professional Speaking	3
GOVT	<u>2302</u>	State & Federal Government II	3	ELCT†		Humanities/Fine Arts Selection	3
SOCI	<u>1301</u>	Introduction to Sociology	3	ELCT†††		Computer Science/Micro-computer Tech. Selection	3
MATH		<u>MATH 1314</u> or higher	3	ELCT**		Law Enforcement Elective	3
PHED		Physical Education	1				
ELCT**		Law Enforcement Elective	3				
			17				17
						Total Hours	67

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, or 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, and 1309.

** Law Enforcement Elective Selection includes: LAWE 1310, 1315, 2301, 2303, 2306, 2308, 2310, 2312, 2313, 2314, 2315; EMET 1502.

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

LEGAL ASSISTANT

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
LEGA	1401	Introduction to Paralegalism	4	LEGA	1306	Criminal Law	3
LEGA	1302	Legal Office Ethics and Management	3	LEGA	1307	Civil Litigation	3
LEGA	1304	Principles of Family Law	3	MATH	1324	Finite Mathematics	3
ENGL	1301	Composition and Rhetoric I	3	MISC	1420	Word Processing for Microcomputers	4
GOVT	2301	State & Federal Government I	3	ENGL	1302	Composition and Rhetoric II	3
PHED		Physical Education	1	PHED		Physical Education	1
			17				17

Second Year

First Semester			Credit	Second Semester			Credit
LEGA	2302	Contract Law and the U.C.C.	3	LEGA	2405	Wills, Trust, and Probate	4
LEGA	2306	Techniques of Legal Research	3	LEGA*		Approved Elective	3
LEGA*		Approved Elective	3	LEGA*		Approved Elective	3
ACCT	2301	Principles of Accounting I	3	ELCT†		Humanities/Fine Arts Selection	3
GOVT	2302	State & Federal Government II	3	SPCH		SPCH 1315 or 1321	3
			15				16
				Total Hours			65

* Approved Elective Selection includes: LEGA 1305, 1308, 1309, 1403, 2301, 2303, 2307, 2401, and 2404.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

MAINTENANCE TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
INDU	1400	Industrial Fundamentals	4	AIRC	1401	Electricity for Air Conditioning & Refrigeration I	4
AIRC	1400	Basic Air Conditioning & Refrigeration Theory	4	MTNT	1402	Electricity	4
MTNT	1401	Carpentry I	4	<u>ENGL</u>	<u>1312</u>	Communications Skills	3
MATH		<u>MATH 1314</u> or higher	3	WELD	1401	Beginning Gas Welding	4
PHED		Physical Education	1	ELCT†		Humanities/Fine Arts Selection	3
			16				18

Second Year

First Semester				Credit	Second Semester				Credit
MTNT	2402	Carpentry II		4	MTNT	2404	Painting & Refinishing		4
MTNT	2403	Plumbing I		4	MTNT	2410	Plumbing II		4
AIRC	1403	Heating Systems		4	WELD	1402	Beginning Arc Welding		4
ELCT†††		Computer Science/Micro-computer Tech. Selection		4	<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking		3
<u>GOVT</u>	<u>2301</u>	State & Federal Government I			DRDS	1303	Architectural Blueprint Reading		3
or									
<u>GOVT</u>	<u>2302</u>	State & Federal Government II		3					
				19					18

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

MATHEMATICS

Associate in Arts or Science Degree

(This is a suggested curriculum. See pages 23-24 for degree requirements.)

This curriculum is recommended for students pursuing either an Associate in Arts degree or an Associate in Science degree from Central Texas College.

Students should check requirements of the institution to which they intend to transfer, as requirements may vary.

First Year

First Semester			Credit	Second Semester			Credit
<u>MATH</u>	<u>1314</u>	College Algebra	3	<u>MATH</u>	<u>1348</u>	Analytic Geometry	3
<u>MATH</u>	<u>1316</u>	Trigonometry	3	<u>ELCT</u> *		Science or Language	4
<u>ELCT</u> *		Science or Language	4	<u>COSC</u>	<u>1403</u>	Introduction to Computer	
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3			Science & Programming	4
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>PHED</u>		Physical Education	1	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
				<u>PHED</u>		Physical Education	1
			17				18

Second Year

First Semester			Credit	Second Semester			Credit
<u>MATH*</u>	<u>*2313</u>	Calculus I	3	<u>MATH</u>	<u>2314</u>	Calculus II	3
<u>ENGL***</u>		English Elective	3	<u>SPCH</u>	<u>SPCH 1315 or 1321</u>		3
<u>GOVT</u>	<u>2301</u>	State & Federal Government I	3	<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3
<u>SCIE</u>		Science Elective	3-4	<u>SCIE</u>		Science Elective	3-4
<u>ELCT†</u>		Humanities/Fine Arts Selection	3	<u>ELCT****</u>		Elective	3
<u>PHED</u>		Physical Education	1	<u>PHED</u>		Physical Education	1
			16-17				16-17
						Total Hours	67-69

* Choice of elective determines the type of degree.

** Freshmen with adequate mathematics background may enroll in MATH 2313 during the fall semester with the consent of the Mathematics Department Chair.

*** English Elective Selection includes: ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

**** To meet the requirement of 18 hours of sophomore courses, student must take a sophomore-level speech or elective.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

MICROCOMPUTER TECHNOLOGY INFORMATION MANAGEMENT

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
MISC	1400	Microcomputer Fundamentals	4	MISC	1440	Data Base for Microcomputers	4
MISC	1420	Word Processing for Microcomputers	4	MISC	1451	Introduction to Microcomputer Programming	4
MISC	1430	Spreadsheets for Microcomputers	4	MISC	1461	Operating Systems	4
MISC	1450	Microcomputers for Business	4	MGMT	1305	Introduction to Management	3
PHED		Physical Education	1	<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
			17				18

Second Year

First Semester			Credit	Second Semester			Credit
ELCT		COSC/MISC Technical Elective	4	MISC	2301	Information Center Management	3
MATH		<u>MATH 1314</u> or higher	3	MISC	2402	Systems in the MIS Environment	4
ELCT*		ACCT Elective Selection	3	MISC	2454	Data Communications & Networking	4
ELCT†		Humanities/Fine Arts Elective	3	MISC			
ELCT††		Social/Behavioral Science Elective	3	ELCT		COSC/MISC Technical Elective	4
			16	<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
							18
				Total Hours			69

* ACCT Elective Selection includes WOPO 2304; OADM 2304; and ACCT 2301

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

MICROCOMPUTER TECHNOLOGY PROGRAMMER ANALYST

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
MISC	1405	Computer Concepts and Analysis	4	MISC	1404	COBOL Programming	4
MISC	1451	Introduction to Microcomputer Programming	4	MISC	1406	Computer Organization & Architecture	4
ENGL	1301	Composition and Rhetoric I	3	MISC	1454	PASCAL Programming	4
MATH		<u>MATH 1314</u> or higher	3	MISC	1461	Operating Systems	4
PHED		Physical Education	1				
			15				16

Second Year

First Semester			Credit	Second Semester			Credit
MISC	2456	C Language Programming I	4	MISC	2402	Systems in the MIS Environment	4
ELCT		COSC/MISC Technical Elective	4	MISC	2454	Data Communications & Networking	4
ELCT		COSC/MISC Technical Elective	4	ELCT		COSC/MISC Technical Elective	4
ELCT*		ACCT Selection	3	SPCH	1321	Business and Professional Speaking	3
ELCT††		Social/Behavioral Science Selection	3	ELCT†		Humanities/Fine Arts Selection	3
			18				18
				Total Hours			67

* ACCT Elective Selection includes WOPO 2304; OADM 2304; and ACCT 2301.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

MILITARY SCIENCE MANAGEMENT

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
MILS*	1101	Military Science I	1-2	MILS	1102	Fundamentals of Leadership	1
MILS	1301	U.S. Heritage, Mission, Organization	3	MILS	2101	Stress Management	1
MILS	1300	Military Organization & Staff Functions	3	MILS*	1201	Military Science II	2
MILS	1202	Briefing Techniques, Aids and Devices	2	MILS	1203	Professionalism and Responsibility	2
MGMT	1204	Setting Objectives and Goals	2	MGMT	1205	Analysis of Training Requirements	2
MILS		Lower Level MILS Elective	2	<u>MATH</u>	<u>1342</u>	Elementary Statistics	3
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
PHED		Physical Education	1	ELCT†		Humanities/Fine Arts Selection	3
				PHED		Physical Education	1
			17-18				18

Second Year

First Semester			Credit	Second Semester			Credit
MILS	2211	Job Performance & Motivation	2	MILS	2206	Management Learning Strategies	2
MILS*	2201	Military Science III	2	MILS	2351	Advanced Leadership	3
MILS	1207	Professional Development of the Manager	2	MILS	2354	Management Problems	3
MILS**		MILS Elective	3	MILS	2103	Time Management	1
<u>GEOG***</u>	<u>1302</u>	Cultural Geography	3	ELCT****		MILS or MGMT Elective	3
ELCT		MILS or MGMT Elective	3	WOPO	1101	Introduction to MS-DOS	1
PHED		Physical Education	1	WOPO	1102	Introduction to WordPerfect	1
				WOPO	1104	Introduction to Lotus 123	1
				PHED		Physical Education	1
			16				16
				Total Hours			67-68

* May substitute MILS 1106, 1107, 1210, 1211, 1212, or 1213

** MILS 2371, 2372, or 2373; HIST 2370.

*** May substitute any foreign language or PHIL 2303.

**** Approved Electives: MILS 1105, 1108, 1204, 1205, 1208, 1209, 2109, 2202, 2203, 2204, 2205, 2207, 2208, 2209, 2210, 2261, 2301, 2309, 2372; or MGMT 1206, 1305, 2309, 2310

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

OFFICE MANAGEMENT

Associate in Applied Science Degree

First Year

First Semester		Credit	Second Semester		Credit
WOPO*	1303 Beginning Keyboarding/ Data Entry	3	WOPO	1304 Intermediate Information Processing Applications	3
OADM	1309 Business Mathematics and Calculating Machines	3	WOPO	1307 Word Processing and Transcription	3
MGMT	1304 Work Organization	3	OADM	1305 Records Management	3
MGMT	1305 Introduction to Management	3	OADM	1308 Business Correspondence	3
ENGL	<u>1301</u> Composition and Rhetoric I	3	ELCT**	OADM/WOPO/MGMT Selection	3
WOPO	1101 MS-DOS: An Introduction	1	PHED	Physical Education	1
		16			16

Second Year

First Semester			Credit	Second Semester			Credit
OADM	2304	Office Accounting I	3	OADM	2305	Office Accounting II	3
MGMT	2305	Business Law I	3	OADM	2307	Automated Office Administration	3
SPCH	1321	Business and Professional Speaking	3	MGMT	2302	Human Resource Management	3
ELCT††		Social/Behavioral Science Selection	3	MGMT	2306	Business Law II	3
MATH		MATH 1314, 1324, or 1342	3	ELCT†		Humanities/Fine Arts Selection	3
PHED		Physical Education	1	ELCT**		OADM/WOPO/MGMT	3
			16				18
Total Hours							66

* Levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests.

** Elective selections approved by Department Chair. Courses may be chosen leading toward general, medical, or legal secretarial programs upon department approval.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

OFFSET PRINTING

One-Year Certificate of Completion

First Semester			Credit	Second Semester			Credit
OPRT	1401	Introduction to Offset Printing	4	OPRT	1405	Desk Top Publishing	4
OPRT	1402	Camera, Stripping, and Platemaking	4	OPRT	2401	Advanced Camera, Stripping, and Platemaking	4
OPRT	1403	Offset Press Operation I	4	OPRT	2402	Offset Press Operation II	4
OPRT	1404	Bindery Operation I	4	OPRT	1408	Offset Printing Equipment Maintenance	4
WOPO	1303	Beginning Keyboarding/ Data Entry	3	MISC	1450	Microcomputers for Business	4
			19				20
				Total Hours			39

Underlined numbers are common course numbers. See page 16.

PHOTOGRAPHY

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
PHOT	1401	Introduction to Photography	4	PHOT	1403	Advanced Photography	4
PHOT	1402	Portrait Photography	4	PHOT	1404	Commercial Photography	4
MATH	<u>1314</u>	MATH 1314 or higher	3	PHOT	1405	Advanced Print Making	4
ENGL	<u>1312</u>	Communications Skills	3	ELCT††		Social/Behavioral Science Selection	3
PHED		Physical Education	1	PHED		Physical Education	1
			15				16

Second Year

First Semester			Credit	Second Semester			Credit
PHOT	2403	Portrait Retouching	4	PHOT	2404	Photographic Production	4
PHOT	2406	Color Photography I	4	PHOT	2407	Color Photography II	4
COMM	<u>1307</u>	Communications Media	3	OADM	2304	Office Accounting I	3
ELCT†		Humanities/Fine Arts Selection	3	MISC	1450	Microcomputers for Business	4
BUSI	<u>1301</u>	Introduction to Business	3	PHED		Physical Education	1
PHED		Physical Education	1				16
			18				Total Hours
							65

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

REAL ESTATE

Associate in Applied Science Degree

First Year

First Semester		Credit	Second Semester		Credit
MGMT	MGMT 1304 or 1306	3	REAE	1301 Real Estate Fundamentals	3
<u>ENGL</u>	<u>1301</u> Composition and Rhetoric I	3	REAE	1302 Real Estate Marketing	3
MATH	<u>MATH 1314, 1324, or 1342</u>	3	REAE	1304 Real Estate Law: Agency	3
SPCH	<u>SPCH 1315 or 1321</u>	3	REAE	REAE Elective	3
ELCT	<u>BUSI 1301</u> or MGMK 1311	3	MISC	1450 Microcomputers for Business	4
PHED	Physical Education	1	PHED	Physical Education	1
		16			17

Second Year

First Semester		Credit	Second Semester		Credit
REAE	2300 Texas Real Estate Law: Earnest Money Contracts	3	REAE	2304 Real Estate Finance	3
REAE	2302 Residential Real Estate Appraisal	3	ELCT	REAE 2402 or MGMT 2317	4-3
ELCT	REAE 2401 or MGMT 2316	4-3	ECON	<u>ECON 2301 or 2302</u>	3
MGMT	MGMT 2305 or 2306	3	ELCT	Elective	1
<u>ACCT*</u>	<u>2301</u> Principles of Accounting I	3	<u>ACCT*</u>	<u>2302</u> Principles of Accounting II	3
		16-15	ELCT†	Humanities/Fine Arts Selection	3
			Total Hours		16-17
					66-64

* OADM 2304 and 2305 may be substituted.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

SMALL GAS ENGINE REPAIR

Associate in Applied Science

First Year

First Semester			Credit	Second Semester			Credit
INDU	1400	Industrial Fundamentals	4	SGER	1407	Small Gas Engine Service	4
SGER	1401	Gas Engine Fundamentals	4	MATH		<u>MATH 1314</u> or higher	3
ENGL	<u>1312</u>	Communications Skills	3	WELD	1402	Beginning Arc Welding	4
WELD	1401	Beginning Gas Welding	4	ELCT†		Humanities/Fine Arts Selection	3
PHED		Physical Education	1	SGER	2311	Shop Organization and Management	3
			16				17

Second Year

First Semester			Credit	Second Semester			Credit
SGER	2402	Chain Saw Service & Repair	4	SGER	2410	Lawn & Garden Equipment Service	4
SGER	2408	Outboard Motor Service and Repair	4	SGER	2413	Large Air Cooled Engines	4
SGER	2412	Motion Drive Systems	4	MGMT	1308	Small Business Management	3
<u>GOVT</u>	<u>2301</u>	State & Federal Government I		ELCT†††		Computer Science/Micro-computer Tech. Selection	3
or				<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3				17
ELCT		Elective	3				68
			18				
				Total Hours			68

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

SOCIAL SCIENCE

Associate in Arts Degree

(This is a suggested curriculum. See page 23 for degree requirements.)

First Year

First Semester			Credit	Second Semester			Credit
<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3	<u>ENGL</u>	<u>1302</u>	Composition and Rhetoric II	3
<u>HIST</u>	<u>1301</u>	History of the U.S. to 1877	3	<u>HIST</u>	<u>1302</u>	History of the U.S. from 1877	3
<u>LANG*</u>	<u>1411</u>	Beginning French I, German I, or Spanish I	4	<u>LANG*</u>	<u>1412</u>	Beginning French II, German II, or Spanish II	4
SCIE*		Biology, Chemistry, Physics, or Geology	4	SCIE*		Biology, Chemistry, Physics, or Geology	4
<u>MATH</u>	<u>1314</u>	College Algebra	3	ELCT†		Humanities/Fine Arts Selection	3
PHED		Physical Education	1	PHED		Physical Education	1
			18				18

Second Year

First Semester			Credit	Second Semester			Credit
<u>ENGL**</u>		ENGL Selection	3	ELCT		SPCH Selection	3
<u>GOVT</u>	<u>2301</u>	State & Federal Government I	3	<u>GOVT</u>	<u>2302</u>	State & Federal Government II	3
<u>PSYC</u>	<u>2301</u>	Introduction to Psychology	3	<u>SOCI</u>	<u>1301</u>	Introduction to Sociology	3
ELCT†††		Computer Science/Micro- computer Tech. Selection	4	ELCT††		Social/Behavioral Science Selection	3
ELCT***		Social Science	3	ELCT		Elective	3
PHED		Physical Education	1	PHED		Physical Education	1
			17				16
				Total Hours			69

* Students should check requirements of the institution to which they intend to transfer.

** 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.

Underlined numbers are common course numbers. See page 16.

SPEECH

Associate in Arts Degree

First Year

First Semester	Credit	Second Semester	Credit
<u>ENGL</u> <u>1301</u> Composition & Rhetoric I	3	<u>ENGL</u> <u>1302</u> Composition & Rhetoric II	3
<u>HIST</u> <u>1301</u> History of the U.S. to 1877	3	<u>HIST</u> <u>1302</u> History of the U.S. from 1877	3
<u>LANG*</u> <u>1411</u> Beginning French I, German I, or Spanish I	4	<u>LANG*</u> <u>1412</u> Beginning French II, German II, or Spanish II	4
<u>SPCH</u> <u>1315</u> Public Speaking	3	<u>ELCT*</u> Elective	3
<u>ELCT*</u> Elective	3	<u>MATH</u> <u>1314</u> College Algebra	3
<u>PHED</u> Physical Education	1	<u>PHED</u> Physical Education	1
	17		17

Second Year

First Semester	Credit	Second Semester	Credit
<u>ENGL**</u> English Selection	3	<u>ENGL**</u> English Selection	3
<u>GOVT</u> <u>2301</u> State & Federal Government I	3	<u>GOVT</u> <u>2302</u> State & Federal Government II	3
<u>SPCH</u> <u>2341</u> Oral Performance of Literature	3	<u>SPCH</u> <u>1318</u> Interpersonal Communications	3
<u>SCIE*</u> Biology, Chemistry, Physics, or Geology	4	<u>MISC</u> <u>1450</u> Microcomputers for Business	4
<u>ELCT†</u> Humanities/Fine Arts Selection	3	<u>SCIE*</u> Biology, Chemistry, Physics, or Geology	4
<u>PHED</u> Physical Education	1	<u>PHED</u> Physical Education	1
	17		18
		Total Hours	69

* Students should check requirements of the institution to which they intend to transfer as requirements may vary. Electives should be chosen which will support their major.

** English courses include ENGL 2322, 2323, 2327, 2328, 2332, and 2333.

† Humanities/Fine Arts Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

TELEVISION/RADIO/TELECOMMUNICATIONS

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
TELE	1301	Introduction to Telecommunications	3	TELE	1305	Writing for Broadcast and Media	3
TELE	1402	Beginning Radio Production	4	TELE	1407	Advanced Audio Production	
TELE	1403	Beginning Television Production	4	or			
TELE	1406	Introduction to Field Production	4	TELE	1405	Announcing and Performance for Radio & Television	4
<u>SPCH</u>	<u>1315</u>	Public Speaking	3	TELE	1408	Advanced Television Production	4
				<u>ENGL</u>	<u>1301</u>	Composition and Rhetoric I	3
				<u>MATH</u>	<u>MATH 1314</u> or higher		3
				<u>PHED</u>	Physical Education		1
			18				18

Second Year

First Semester			Credit	Second Semester			Credit
TELE	2309	Broadcast and Cable Operations		TELE	2409	Telecommunications Projects	4
or				TELE	2408	Telecommunications Internship	4
TELE	2306	Telecommunications Seminar	3	TELE	2311	Advertising & Promotions for Telecommunications Majors I	
TELE	2407	Advanced Field Production	4	or			
ELCT		Elective	3	TELE	2304	Broadcast Sales	3
MISC	1450	Microcomputers for Business	4	ELCT†		Humanities/Fine Arts Selection	3
ELCT*		COMM Selection	3	ELCT††		Social/Behavioral Science Selection	3
				PHED		Physical Education	1
			17				18
						Total Hours	71

* Communications Elective Selection includes: COMM 1307 and 2311

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

TRAINING MANAGEMENT SYSTEMS

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
MGMT	1381	Management of Performance Oriented Training	3	MGMT	1385	Analysis of Training Requirements	3
MGMT	1383	Evaluation of Instruction and Training	3	MGMT*		Training Management Elective	6
MGMT	1384	Setting Objectives and Goals	3	ELCT**		Approved Elective	3
ENGL	1312	Communications Skills	3	ELCT†††		Computer Science/Micro-computer Tech. Selec.	3-4
MATH		MATH 1314 or higher	3				
PHED		Physical Education	1	PHED		Physical Education	1
			16				16-17

Second Year

First Semester			Credit	Second Semester			Credit
MGMT	2381	Job Performance & Motivation	3	MGMT	2384	Assessing of Training Standards, Goals, & Objectives	3
MGMT*		Training Management Elective	3	MGMT*		Training Management Elective	3
ELCT***		Sophomore Management Elective	3	<u>SPCH</u>	<u>1321</u>	Business and Professional Speaking	3
ELCT†		Humanities/Fine Arts Selection	3	ELCT††		Social/Behavioral Science Selection	3
ELCT**		Approved Elective	3	ELCT**		Approved Elective	3
PHED		Physical Education	1	PHED		Physical Education	1
			16				16
						Total Hours	64-65

* Training Management Electives include: MGMT 1382, 1386, 1387, 1388, 1389, 2382, 2383, 2385, and 2386

** Approved Electives: MGMT 2150, 2151, 2161, 2162, 2255, 2256, 2257, 2258, 2259, 2351, and 2358.

*** Sophomore Management Electives include: MGMT 2302, 2310; or BUSI 1307.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

TRANSPORTATION TECHNOLOGY

Associate in Applied Science Degree

First Year

First Semester		Credit	Second Semester		Credit
ENGL*	<u>ENGL 1301</u> or <u>1312</u>	3	ELCT*	<u>SPCH 1315</u> or <u>ENGL 2311</u>	3
MATH	<u>MATH 1314</u> or <u>1342</u>	3	OADM 2305	Office Accounting II	
OADM 2304	Office Accounting I		or		
or			<u>ACCT</u>	<u>2302</u> Principles of Accounting II	3
<u>ACCT</u>	<u>2301</u> Principles of Accounting I	3	TRAN 1303	Economics of Transportation I	3
TRAN 1301	Introduction to Transportation	3	TRAN 1304	Interstate Commerce and Practice	3
TRAN 1302	International Trade	3	MGMT 1306	Human Relations	3
PHED	Physical Education	1	PHED	Physical Education	1
		16			16

Second Year

First Semester				Credit	Second Semester				Credit
MGMT	2302	Human Resource Management		3	MGMT	2309	Supervision		3
TRAN	2301	Economics of Transportation II		3	TRAN	2304	Traffic Management II		3
TRAN		Transportation Elective		3	TRAN	2302	Transportation Law and Regulation		3
TRAN	2303	Traffic Management I		3	TRAN		Transportation Elective		3
TRAN	2311	Transportation Marketing		3	ELCT††		Social/Behavioral Science Selection		3
ELCT†††		Computer Science/Micro computer Tech. Selection		3	ELCT†		Humanities/Fine Arts Selection		3
				18					18
					Total Hours				68

* 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.

Underlined numbers are common course numbers. See page 16.

WELDING

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
INDU	1400	Industrial Fundamentals	4	WELD	1403	Intermediate Arc Welding	4
WELD	1401	Beginning Gas Welding	4	WELD	1405	Advanced Gas Welding	4
WELD	1402	Beginning Arc Welding	4	WELD	1406	Blueprinting for Welders	4
MATH		<u>MATH 1314</u> or higher	3	PHED		Physical Education	1
ELCT		Elective	3	<u>ENGL</u>	<u>1312</u>	Communications Skills	3
			18				16

Second Year

First Semester				Credit	Second Semester				Credit	
WELD	2401	Advanced Arc Welding		4	WELD	2404	Pipe II		4	
WELD	2402	Pipe I		4	WELD	2406	Welding Fabrication and			
WELD	2407	GTAW Welding (TIG)		4			Layout		4	
ELCT†††		Computer Science/Micro-			WELD	2408	GMAW Welding (MIG)		4	
		computer Tech. Selection		3	ELCT†		Humanities/Fine Arts Selection		3	
<u>GOVT</u>	<u>2301</u>	State & Federal Government I			<u>SPCH</u>	<u>1321</u>	Business and Professional			
or							Speaking		3	
<u>GOVT</u>	<u>2302</u>	State & Federal Government II		3					18	
				18						
									Total Hours	70

† Humanities/Fine Arts Selection: See page 28.

††† Computer Science/Microcomputer Technology Selection: See page 28.

Underlined numbers are common course numbers. See page 16.

WORD PROCESSING SPECIALIST

Associate in Applied Science Degree

First Year

First Semester			Credit	Second Semester			Credit
WOPO	1101	MS-DOS: An Introduction	1	SPCH	<u>SPCH 1315 or 1321</u>		3
WOPO*	1303	Beginning Keyboarding/ Data Entry	3	ELCT**	OADM/WOPO Selection		3
OADM	2304	Office Accounting I	3	WOPO*	1304	Intermediate Information Processing Appl.	3
ENGL		English Selection	3	WOPO	1307	Word Processing/ Transcription	3
OADM	1305	Records Management	3	OADM	1308	Business Correspondence	3
ELCT**		OADM/WOPO/MISC Selection	3				15
			16				

Second Year

First Semester		Credit	Second Semester		Credit	
MATH	<u>MATH 1314</u> or higher	3	OADM 2305	Office Accounting II	3	
WOPO 2302	Advanced Information Processing Applications	3	OADM 2307	Automated Office Management	3	
WOPO*** 2308	Information Systems Internship I	3	WOPO 2303	Office Automation	3	
ELCT†	Humanities/Fine Arts Selection	3	WOPO*** 2309	Information Systems Internship II	3	
ELCT**	Elective	3	ELCT††	Social/Behavioral Science Selection	3	
PHED	Physical Education	1	PHED	Physical Education	1	
		16			16	
					Total Hours	63

* 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.

*** Selected locations may substitute OADM 1306 and WOPO 2304.

† Humanities/Fine Arts Selection: See page 28.

†† Social/Behavioral Science Selection: See page 28.

NOTE: Humanities/Fine Arts Selection **OR** Social/Behavioral Science Selection must be sophomore level.

Underlined numbers are common course numbers. See page 16.

COURSE DESCRIPTIONS

(ACCT) ACCOUNTING

ACCT 2301 Principles of Accounting I (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 3

An introduction to the objectives and procedures of cost accounting and control for business firms. It covers the principles & 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) Credit: 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) Credit: 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 & Financial Information Systems I (3-0) Credit: 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 & Financial Information Systems II (3-0) Credit: 3

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

(AIRC) AIR CONDITIONING

AIRC 1201 Air Conditioning & Refrigeration Theory & Application I (1-2) Credit: 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 & Refrigeration Theory & Application II (1-2) Credit: 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 & Refrigeration Theory (3-3) Credit: 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.

AIRC 1401 Electricity for Air Conditioning & Refrigeration I (3-3) Credit: 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) Credit: 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 & Refrigeration II (3-3) Credit: 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) Credit: 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 & Refrigeration III (3-3) Credit: 4

This course will provide the student with an in-depth study of schematic wiring diagrams and electrical troubleshooting using diagrams. Prerequisites: All AIRC 1400-series courses.

AIRC 2401 Advanced Air Conditioning & Refrigeration Theory (3-3) Credit: 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) Credit: 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) Credit: 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, operations of VAV systems, troubleshooting and repair of light commercial air conditioning up to 10-ton capacity.

AIRC 2404 Troubleshooting Air Conditioning & Refrigeration Systems (3-3) Credit: 4

This course provides the student with the fundamentals of electrical testing and troubleshooting 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:* AIRC 1401 and 1406.

AIRC 2405 Heat Pumps I (3-3) Credit: 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) Credit: 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) Credit: 3

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

ANTH 2351 Cultural Anthropology (3-0) Credit: 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) Credit: 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) Credit: 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)	Credit: 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)	Credit: 3
This course is a survey of the major and minor arts from the 14th century to the present.				
ARTS	1311	Design: 2-D	(2-4)	Credit: 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)	Credit: 3
This course gives basic instruction in the principles and elements of design as applicable to three-dimensional design problems.				
ARTS	1316	Drawing I	(2-4)	Credit: 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)	Credit: 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)	Credit: 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	Advertising and Illustration I	(2-4)	Credit: 3
This course is an in-depth study of current concerns and practices in the visual arts including contemporary media and techniques, philosophy of aesthetics, and public accessibility.				
ARTS	2314	Advertising and Illustration II	(2-4)	Credit: 3
This course is an advanced study of commercial art production. It continues principles covered in Advertising and Illustration I. Prerequisite: ARTS 2313.				
ARTS	2316	Oil Painting I	(2-4)	Credit: 3
This course is an introduction to the techniques and materials used in oil-based painting.				
ARTS	2317	Oil Painting II	(2-4)	Credit: 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 & II	(2-4)	Credit: 3, 3
These are life drawing courses which emphasize structure and action of the human figure.				
ARTS	2326	Sculpture I	(2-4)	Credit: 3
This course is an introduction to sculpturing techniques including assemblage, carving, and lost wax casting.				
ARTS	2327	Sculpture II	(2-4)	Credit: 3
This course is a continuation of ARTS 2326 with emphasis on personal expression. Prerequisite: ARTS 2326.				
ARTS	2333	Print Making	(2-4)	Credit: 3
This introductory course covers the fundamentals and creative experimentation in etching, serigraphy, and other print-making media.				

ARTS 2336 Fiberarts I (2-4) Credit: 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) Credit: 3

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

ARTS 2341 Jewelry & Art Metals I (2-4) Credit: 3

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

ARTS 2342 Jewelry & Art Metals II (2-4) Credit: 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) Credit: 3

This course is an introduction to making pottery by hand and/or wheel methods. Glazing and decoration techniques are also covered.

ARTS 2347 Ceramics II (2-4) Credit: 3

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

ARTS 2356 Photography I (2-4) Credit: 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) Credit: 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) Credit: 3

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

ARTS 2367 Acrylic Painting (2-4) Credit: 3

This course covers the properties of color, theory of color and form, and technical procedures of the medium.

ARTS 2371 Foundations of Art (2-4) Credit: 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.

ARTS 2376 Problems in Contemporary Arts (2-4) Credit: 3

This course is an examination of current concerns and practices in contemporary visual art. Recent historical influences, modern aesthetics, contemporary media and techniques, and public accessibility will be covered in classroom lectures and on-site examinations of art and art production.

(ASCI) AVIATION SCIENCE

ASCI 1200 Flight-Solo (1-1) Credit: 2

Flight training to meet the requirements for solo flight. A minimum of 32 hours of instruction of which 13 are dual flight instruction, .5 is solo flight, and 18.5 are oral instruction and briefings. This course is the first of two flight courses necessary to obtain the Private Pilot Certificate. Prerequisite: ASCI 1403 or concurrent enrollment; FAA Medical Certificate of at least a Class II and FAA Student Pilot Certificate (must be obtained within two weeks of starting class).

ASCI 1201 Flight-Private**(1-2) Credit: 2**

EXAMINING AUTHORITY FLIGHT ONLY - Flight training to finish meeting the requirements of Federal Aviation Regulations to obtain the Private Pilot Certificate. Instruction will consist of a minimum of 42 hours of which 10 are dual flight instruction, 19.5 are solo practice, 2 are in an approved ground trainer, and 16.5 are oral instruction and briefings. This course, in conjunction with ASCI 1200, will more than meet the requirements for the issuance of the Private Pilot Certificate. Prerequisite: ASCI 1200 and completion of ASCI 1403 prior to completion of this course. FAA Student Pilot Certificate with at least a Class II FAA Medical Certificate.

ASCI 1204 Flight-Intermediate**(1-3) Credit: 2**

This is the first of two flight courses necessary to obtain the instrument rating on the certificate of a student who holds at least a Private Pilot Certificate with an airplane category. The flight training will consist of a minimum of 64 hours of instruction of which 13 are dual flight instruction in airplanes, 6 are instruction in an approved ground trainer, 30 are solo flight, and 15 are oral instruction and briefings. Prerequisites: Minimum of a Private Pilot Certificate with an Airplane rating, 3 hours of instrument instruction, hold at least a Class II FAA Medical Certificate, and completion or concurrent enrollment in ASCI 1305.

ASCI 1301 Aircraft Science**(3-0) Credit: 3**

This course serves as an introduction to the study of several basic sciences in the aeronautical field, as applied to their theoretical and practical use in aircraft construction and design.

ASCI 1305 Advanced Air Navigation**(3-0) Credit: 3**

The Federal Aviation Regulations covering the privileges, limitations and operations of a commercial pilot, basic aerodynamics and the principles of flight which apply to airplanes. Inspection and certification requirements will be covered and operating limitations, high altitude operations, physiological considerations, weight and balance computations, significance of the use of airplane performance speeds, cruise control, the Airman's Information Manual will be emphasized. Prerequisite: ASCI 1403.

ASCI 1306 Meteorology**(3-0) Credit: 3**

Aviation meteorological phenomena affecting aircraft flight, interpretation of the basic concepts of temperature, pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing and fog. Analysis and use of weather data for flight planning and safety.

ASCI 1403 Air Navigation**(3-3) Credit: 4**

The principles of flight, basics of air traffic control, weather facts, navigational procedures and airplane operation pertinent to the private pilot. Upon successful completion of this course, the student has sufficient knowledge to pass the FAA written examination of the Private Pilot Certificate.

ASCI 2204 Flight-Instrument**(1-3) Credit: 2**

This is the second of two flight courses necessary to obtain the instrument rating on the certificate of a student who holds at least a Private Pilot Certificate with an airplane category. The flight training will consist of a minimum of 70 hours of instruction of which 23 are conducted in an airplane, 10 are in an approved ground trainer, 25 are solo cross-country, and 12 are oral instruction and briefings. Prerequisites: Hold at least a Private Pilot Certificate with an Airplane category; hold a Class II FAA Medical Certificate; a minimum of 95 hours of flight experience of which 25 were solo cross-country since the Private Pilot Certificate was issued; 20 hours of instrument instruction of which no more than 10 were in an approved ground trainer; have completed or will complete ASCI 2407 before the end of this course.

ASCI 2205 Flight-Commercial**(1-3) Credit: 2**

This course will be used to prepare the student for the Commercial Pilot Certificate with an airplane category. The training will consist of a minimum of 64 hours of which 10 are dual flight instruction in a high-performance aircraft; 5 are dual flight instruction in a primary trainer; 30 are solo practice of which 5 are cross-country in a high performance airplane, 5 are solo practice at night, 10 are solo cross-country in a primary trainer, and 10 are local solo flight; and 19 hours of oral instruction and briefings. Prerequisites: Hold at least a Private Pilot Certificate with Airplane category and instrument rating; have at least 145 hours of flight time of which no more than 40 were in an approved ground trainer; hold a current Class II FAA Medical Certificate; have completed or be concurrently enrolled in ASCI 2300, Commercial Ground School. Approved ground school must be completed prior to finishing ASCI 2205.

ASCI 2206 Multi-Engine Flight (1-1) Credit: 2

This course of flight training leads to the FAA Multi-Engine Pilot Rating. This course is designed to give the advanced pilot a greater depth of aircraft experience. A minimum of 35 hours of instruction is provided of which 10 are dual flight instruction, 5 are in the simulator, and 20 are oral instruction and briefings. Prerequisite: ASCI 2205 or a Commercial Pilot Certificate.

ASCI 2208 Instructor Rating (2-2) Credit: 2

This flight course prepares the experienced pilot for the FAA Certified Flight Instructor Certificate for airplanes. Includes 25 hours of dual flight instruction and 39 hours of oral instruction and briefings. Prerequisite: Commercial Pilot Certificate.

ASCI 2209 Airline Transport Pilot (1-2) Credit: 2

Airline Transport Pilot is the most comprehensive rating issued by the Federal Aviation Administration. Flight and ground training to qualify for the certificate is provided of which 25 hours are dual flight instruction, 2 are for the FAA Check Flight, and 21 are oral instruction and briefings. Prerequisites: First Class FAA Medical Certificate, Age 23, 1,500 hours of approved flight time, and Instrument Rating.

ASCI 2210 Commercial Transition Flight I (1-3) Credit: 2

This is the first of two courses to transition Commercial Rotorcraft Helicopter Rated Pilots to Commercial Airplane, Single-Engine, Land Rated Pilots. The course covers 64 hours of instruction of which 20 are dual flight instruction, 2 are in the simulator, 25 are solo flight, and 17 are oral instruction and briefings. Prerequisite: FAA Commercial Rotorcraft Helicopter Rating, Class II FAA Medical Certificate, and ASCI 2300 or concurrent enrollment.

ASCI 2211 Commercial Transition Flight II (1-3) Credit: 2

A continuation of ASCI 2210 to complete the requirements for a Commercial, Single-Engine, Land Aircraft Rating. The course consists of 64 hours of instruction of which 20 are dual flight instruction with 5 in the simulator and 5 in a complex aircraft, 25 are solo flight with 5 in a complex aircraft, and 19 are oral instruction and briefings. Prerequisite: ASCI 2210 and 2407 or concurrent enrollment.

ASCI 2212 Instrument Flight Instructor (1-2) Credit: 2

A program of advanced flight training to prepare the experienced Instrument Pilot to pass the FAA requirements for the Instrument Flight Instructor Certificate for Airplane rating. A minimum of 48 hours of instruction is provided of which 20 are dual flight instruction, 2 are FAA Check Flight, and 26 are oral instruction and briefings. Prerequisite: Certified Flight Instructor Certificate and Instrument Rating.

ASCI 2213 Multi-Engine Flight Instructor (1-2) Credit: 2

This course is designed to prepare an applicant for the FAA Multi-Engine Flight Instructor Flight Test. A minimum of 48 hours of instruction is provided of which 20 are dual flight instruction, 2 are FAA Check Flight, and 26 are oral instruction and briefings. Prerequisite: FAA Multi-Engine Rating and FAA Flight Instructor, Single-Engine, Land Rating.

ASCI 2214 Commercial Helicopter Rating (1-3) Credit: 2

Additional Category Commercial Helicopter Rating Course. A minimum of 64 hours solo, 13 hours oral instruction and briefings, and 1 hour for the FAA Check Flight. Prerequisite: FAA Commercial Pilot, Single-Engine, Land Rating.

ASCI 2215 Helicopter Instructor Rating (2-2) Credit: 2

Course prepares a helicopter-rated pilot for the FAA Certified Flight Instructor Certificate for helicopters. This course includes 39 hours of ground training and 25 hours of instructor training (20 in dual flight in a helicopter and 5 of practice ground instruction) by the student. Prerequisite: Commercial Pilot Certificate with a Helicopter category rating.

ASCI 2300 Commercial Ground School (3-0) Credit: 3

This course covers air traffic control procedures pertaining to Commercial Pilot, aviation weather and advanced navigational procedures. Advanced flight maneuvers, low altitude enroute charts, approach plates, and Airman's Information Manual. Also, airplane performance factors on a high-performance aircraft with retractable gear and flaps and constant speed propeller. Prerequisite: ASCI 2407.

ASCI 2301 Aerodynamics (3-0) Credit: 3

This course covers the physical properties of air, airflow, standard atmosphere, forces on solids moving through air, lift, drag, planeform, air foil selection, and performance factors.

ASCI 2303 Air Transportation (3-0) Credit: 3

The development and present status of air transportation, federal legislation, characteristics and classification of air carrier, and the organization and functions of the FAA and the Civil Aeronautics Board are reviewed.

ASCI 2318 Propulsion Systems (3-0) Credit: 3

Aircraft engine theory and principles of operation of various types of aircraft reciprocating engines. Consideration is also given to thermal, mechanical and volumetric efficiencies, superchargers, engine accessories, controls and instrumentation.

ASCI 2407 Instrument Ground School (3-3) Credit: 4

Basic radio fundamentals used by the pilot. A description and practical use of various radio aids for safe aerial navigation including Very High Frequency Omni Direction Range (VOR), Instrument Landing System (ILS), Direction Finding (DF), and others. Charts and approach plates as adapted to radio navigation including the use of the Flight Information Manual and ATC procedures. Prerequisite: ASCI 1305.

(ATBR) AUTOMOTIVE BODY REPAIR

ATBR 1403 Roughing & Alignment I (3-3) Credit: 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 1407.

ATBR 1405 Auto Body Welding I (3-3) Credit: 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) Credit: 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 & Alignment II (3-3) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 2406.

ATBR 2401 Panel Repair and Replacement (3-3) Credit: 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) Credit: 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 & Alignment (3-3) Credit: 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 & Body) (0.3-1) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 (3-2) Credit: 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) Credit: 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 & Test Equipment (3-3) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 & Management (3-3) Credit: 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) Credit: 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) Credit: 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 & Suspension Systems (3-3) Credit: 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. The course will also include principles of heavy-duty suspension systems. Prerequisite or Corequisite: AUTO 1400 or consent of the Department Chair.

AUTO 2406 Engine Diagnosis & Emission (3-3) Credit: 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) Credit: 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 & Injection (3-3) Credit: 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) Credit: 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) Credit: 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) Credit: 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 & Corrosion Control - G (2-2) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 & Cooling Systems - P (2-4) Credit: 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) Credit: 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 & Systems (3-0) Credit: 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 & Pneumatics - A (2-6) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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. (This course may be offered via television.)
- BIOL 1408 General Biology I (3-3) Credit: 4**
Fundamental principles of living organisms; includes cell structure/function, metabolic processes, DNA, reproduction, and genetics. Includes an introduction to classification and life cycles of protists, prokaryotes, and fungi. Lab required.
- BIOL 1409 General Biology II (3-3) Credit: 4**
Fundamental concepts of tissues and organ systems of plants and animals; introduction to classification of plants and animals; relationships among organisms in ecological systems and natural selection. Lab required. Prior completion of BIOL 1408 recommended.
- BIOL 1411 General Botany (3-3) Credit: 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 recommended.
- BIOL 1413 General Zoology (3-3) Credit: 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 recommended.
- BIOL 1424 Plant Taxonomy (3-3) Credit: 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 2316 Human Genetics (3-0) Credit: 3**
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 is discussed. Prerequisites: BIOL 1408 or consent of the Department Chair.
- BIOL 2401 Human Anatomy (3-3) Credit: 4**
Basic human anatomy designed for nursing students and students interested in medical careers. Laboratory includes anatomical models and displays, audiovisual materials, microscopy, and specimen dissection in the lab. A one-semester course in Biology is a preferred prerequisite.
- BIOL 2402 Human Physiology (3-3) Credit: 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 2421 Microbiology (3-3) Credit: 4**
Fundamental principles of microbiology; includes study of morphology, physiology, and classification of microbes and their relations to soil, food, water, disease, and immunology. Designed for nursing and all health-related majors. Prerequisite: Any college biology.
- BIOL 2428 Vertebrate Zoology (3-3) Credit: 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. Prerequisite: BIOL 1408, 1409, 1413, or consent of the Department Chair. Labs include dissections.

(BUSI) BUSINESS

BUSI 1301 Introduction to Business (3-0) Credit: 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) Credit: 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) Credit: 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.

(CHDV) EARLY CHILDHOOD PROFESSIONS

CHDV 1301 Fundamentals of Early Childhood Education (2-2) Credit: 3

This course covers the history, philosophy, and ethics of child care, types of child care, facilities, laws and standards that are applicable to child care centers. Emphasis is placed on the responsibilities and duties of the child care worker. Experiences are gained in how to provide for the child's health needs and how to make the child care center a safe place for children.

CHDV 1303 Curriculum Resources (2-2) Credit: 3

This is a three-hour credit course which, taken concurrently with CHDV 1322, articulates with Early Childhood Professions II. The second in a series of core courses, this course provides hands-on experience in selecting, preparing, and presenting discovery learning activities. The focus is on inexpensive teacher-made materials. Includes planning and implementing developmentally appropriate learning activities in art, literature, music, movement, dramatic play, science, math, and manipulatives. Developing a curriculum which adapts to the needs of children with special needs, including a multicultural approach, is embraced.

CHDV 1305 Instructional Aids (2-2) Credit: 3

This course is designed to instruct child care personnel and teachers' aids in the proper operation of various types of audiovisual equipment and the handling of associated materials. Students will also become familiar with resources for free materials and how to construct simple training aids such as bulletin boards, mobiles, picture mounting, and laminating.

CHDV 1306 Physical Development and Disorders in Children (2-2) Credit: 3

Normal motor development and techniques for screening young children for motor skills development. Methods and materials used for assisting children with physical disabilities and for promoting activities of daily living.

CHDV 1307 Techniques for Child Guidance for the Special Child (2-2) Credit: 3

Normal development of emotional responses in children; understanding emotional behavior disorders in children; techniques for screening children for emotional difficulties; methods and materials used for assisting children with emotional disabilities.

CHDV 1309 Child Guidance and Group Management (2-2) Credit: 3

This three hour credit course provides an examination of theoretical approaches to guidance; appropriate application; planning strategies; advanced observation techniques; site-based experiences; ethical problem solving; and teamwork skills in group management. Direct and indirect methods of guiding the individual child, or group of children, toward positive self-esteem and self-control are emphasized.

CHDV 1310 Growth and Development of Children (2-2) Credit: 3

This is a three-hour lecture course which includes the examination of emotional, social, physical, and intellectual development of the child to puberty. This course considers genetic and prenatal influences on the child and includes the study of individual differences in ages and stages of development.

CHDV 1324 Safety, Health, and Nutrition (2-2) Credit: 3

This is a three-hour credit course which focuses on information, issues, procedures, and experiences related to the safety and health of a child in a care and education setting. Staff teamwork, ethical problem solving, and interpersonal relationship skills are incorporated in course objectives.

CHDV 1327 Families and Communities in a Multicultural World (2-2) Credit: 3

This course explores the factors that influence a child's development--culture, family, neighborhood, child care staff, and community. Includes professional development experiences in self-understanding and leadership. Emphasizes strategies for utilizing parents and community resources; parent education guidelines; ethical problem solving; and activities for building staff relationships and developing cross-cultural awareness and sensitivity.

CHDV 1328 Management: Intergenerational Professions (2-2) Credit: 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.

CHDV 1406 Learning Environments I (3-2) Credit: 4

This is a four-hour credit course which focuses on developmentally appropriate activities, guidance, and the environment for infant-toddler care. Provides for opportunities to maximize long-range development that occurs within the first three years of life and includes writing daily and weekly activities and objectives. Staff team building and ethical problem solving are embedded in course objectives.

CHDV 1408 Learning Environments II (3-2) Credit: 4

This is a four-hour credit course which centers on developmentally appropriate practice during the play years. 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 objectives.

CHDV 1501 Introduction to Early Childhood Education (3-6) Credit: 5

This is a five-hour credit course which articulates with Early Childhood Professions II. The first in a series of core courses, this course provides an introduction to theories and practices in early childhood care and education, and opportunities to observe children in a variety of settings. At the completion of this course, the student will demonstrate mastery at a beginning level in the competencies of the functional areas of: professionalism; child growth, development and learning; guidance and group management; curriculum development, content and implementation; family and community relations; safety, health, and nutrition; and program management.

CHDV 2101 Early Childhood Professions (Seminar) (1-0) Credit: 1

A course that deals with trends and advancements in child development. When used in the Child Development Associate Program, this course will provide instruction on preparing a portfolio and preparing for assessment.

CHDV 2301 The Child with Special Needs (2-2) Credit: 3

This is a three-hour course which provides an overview of disabling conditions in children; emphasizes mainstreaming strategies and includes curriculum planning, observation, and hands-on experiences with children in center settings. Problem solving activities and teamwork skills are embedded in course objectives.

CHDV 2303 Managing Child Care Centers (2-2) Credit: 3

This course covers the practical aspects of managing a child care center, with emphasis on legal issues and applications; fiscal management; personnel planning, hiring, and staff development; physical plant responsibilities; program and enrollment practices; duties to parents; and program implementation.

CHDV 2304 Management Techniques for Directors (2-2) Credit: 3

This is the second of two courses in child care administration. It covers the theoretical aspects of managing child development programs. The main emphasis is placed on leadership styles, formulating and implementing staff development and program goals, problem solving, delegation and decentralization, increasing staff morale, preventing burnout, and theories of managing a child care center.

CHDV 2305 Advanced Math and Science in Early Childhood (2-2) Credit: 3

Emphasis is placed on strategies, activities, and materials for teaching mathematical and science concepts and skills in early childhood. This course includes identifying, classifying, sequencing, ordering, and predicting cause/effect relationship skills in preschool children. Science activities, as presented, will stimulate the child's cognitive growth. Methods are presented that will assist three- to five-year-old children to discover information about their natural and manmade world.

CHDV 2314 Program and Planning Implementation (2-2) Credit: 3

This course is intended to motivate and inform caregivers 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.

CHDV 2402 Special Projects (1-15) Credit: 4

This course is designed to allow the advanced child development student the opportunity to undertake a project that involves working with preschool-age children. The area of specialization will be selected and performed under the supervision of the instructor. Prerequisite: Prior consent of the Department Chair.

CHDV 2409 Learning Environments III (3-2) Credit: 4

This is a four-hour credit course which focuses on the developmentally appropriate needs and characteristics of school-age children. It includes curriculum strategies for a population that experiences great changes in physical, mental, and social development; environmental planning; age-appropriate materials and activities; guiding children in self-management; and conflict resolution. Staff teamwork, ethical problem solving, and interpersonal relationship skills are incorporated in the course objectives.

CHDV 2410 Learning Environments IV (3-2) Credit: 4

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 proactive for mixed age groups, planning the environment, and ways to use mixed-age grouping to the children's advantage.

(CHEM) CHEMISTRY

CHEM 1406 Introduction to General Chemistry (3-3) Credit: 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) Credit: 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) Credit: 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) Credit: 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 2401 Analytical Chemistry**(3-4) Credit: 4**

Fundamentals of quantitative analysis are presented. Techniques and theory of volumetric and gravimetric analysis are discussed and used in laboratory exercises. Acid-base and redox titrations are included. Prerequisite: CHEM 1412.

CHEM 2423, 2425 Organic Chemistry I & II**(3-4) Credit: 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: 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****(2-4) Credit: 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) Credit: 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) Credit: 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 & Operational Programming**(3-3) Credit: 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) Credit: 4**

An introduction to terminology, theories, and technology involving all types of robotics and tendons, both general and industrial oriented. Prerequisite: ELTE 1401, CMET 1401. Corequisite: ELTE 1403.

CMET 1405 Local Area Networks**(3-3) Credit: 4**

This course covers system design, configuration, operation, management, and troubleshooting of local and wide area networks.

CMET 1409 CRT Systems**(3-3) Credit: 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) Credit: 2**

An advanced course 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) Credit: 2

An advanced course 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) Credit: 4

An advanced course 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) Credit: 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. Prerequisite: CMET 1401 and 1403.

CMET 2404 Computer System Diagnosis & Maintenance (3-3) Credit: 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) Credit: 4

A study in the use of microprocessor 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) Credit: 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) Credit: 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, MPA 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. Prerequisite: CMET 1401 and ELTE 1403.

CMET 2410 Advanced Consumer Servicing (3-3) Credit: 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) Credit: 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. Prerequisite: CMET 1403 and ELTE 1403.

(COES) CONSUMER ELECTRONICS TECHNOLOGY

COES 2301 TV Shop Practices (1-6) Credit: 3

An in-depth study of basic procedures used in the modern TV shop. Includes record keeping, stocking and ordering procedures, shop management, and advanced techniques of TV repair. Prerequisite: CMET 1409 or equivalent.

COES 2408 CATV, MATV, and CCTV Systems**(3-3) Credit: 4**

A study of large-scale TV cable systems, small-scale master antenna systems, and close circuit surveillance systems. It includes the design, selection, configuration, installation, and troubleshooting.

COES 2409 Advanced Television Servicing**(2-4) Credit: 4**

The operation and servicing of the more complicated television receiver circuits are covered in this course. Special attention is given to the use of techniques and equipment for the most economical solutions to difficult problems. Includes an introduction to transistorized and color television. Prerequisite: CMET 1409.

(COMM) COMMUNICATIONS**COMM 1129, 1130 Newspaper Publications I & II****(1-0) Credit: 1**

Enables students to work on the college newspaper staff and to learn about news and feature writing, photojournalism, newspaper design, advertising and the ethics of reporting. These classes should accompany COMM 2315.

COMM 1307 Communications Media**(3-0) Credit: 3**

Instruction in mass media of the modern world. A survey of all mass media, their purposes, and their methods of operation.

COMM 2129, 2130 Newspaper Publications III & IV**(1-0) Credit: 1**

Enables students to work on the college newspaper staff and to learn about news and feature writing, photojournalism, newspaper design, advertising and the ethics of reporting. These classes should accompany COMM 2315.

COMM 2305 Editing, Layout and Design, and Headline Writing**(3-0) Credit: 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.

COMM 2311 News Gathering and Reporting I**(3-0) Credit: 3**

Instruction in the fundamental news gathering and writing techniques, interviewing techniques, and discussion of news sources and values.

COMM 2315 News Gathering and Reporting II**(3-0) Credit: 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. Concurrent enrollment in COMM 2129.

(COSC) COMPUTER SCIENCE**COSC 1100 Special Topics****(0-3) Credit: 1**

Recent developments and topics of current interest. May be repeated when topics vary.

COSC 1300 Computer Information Processing**(3-0) Credit: 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. Computer Literacy course for non-computer majors.

COSC 1400 Computer Science Fundamentals**(3-3) Credit: 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) Credit: 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 1402 Advanced Operations Lab (1-15) Credit: 4**
This course consists of supervised work in a computer center. The students learn to operate the computer and peripheral equipment. Prerequisite: COSC 1401. Corequisite: COSC 2403 and consent of the Department Chair.
- COSC 1403 Introduction to Computer Science & Programming (3-3) Credit: 4**
Introductory programming course for Computer Science majors. Problem solving, algorithm development, pseudocode, and flowcharts. In-depth coverage of a high-level language through programming assignments.
- COSC 1404 COBOL Programming (3-3) Credit: 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. Prerequisite: COSC 1403.
- COSC 1405 Computer Concepts and Analysis (3-3) Credit: 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.
- COSC 1406 Computer Organization & Architecture (3-3) Credit: 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 and COSC 1405 OR 1400 and 1401.
- COSC 1407 RPG Programming (3-3) Credit: 4**
Report Program Generator (RPG)--a problem-oriented language involving fixed program logic, file description, input calculation, and output for practical business oriented problems. Prerequisite: COSC 1403.
- COSC 1408 AS/400 Concepts & Operations (3-3) Credit: 4**
An introduction to the concepts and operations of AS/400 hardware and software. Prerequisite: 8 semester hours in computer courses.
- COSC 1409 Computer Operations Internship (1-20) Credit: 4**
This course consists of on-the-job computer operations training that utilizes the principles, knowledge and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College coordinator. Prerequisite: 12 semester hours in Computer Science courses, including COSC 1401, and consent of the Department Chair.
- COSC 2110 Topics in Computer Science Laboratory (0-3) Credit: 1**
Laboratory for COSC 2310 when topic has a required laboratory.
- COSC 2310 Topics in Computer Science (3-0) Credit: 3**
Study of recent developments and topics of current interest in computer science. Prerequisite: 12 semester hours in Computer Science or the consent of the Department Chair.
- COSC 2401 Advanced COBOL (3-3) Credit: 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. File design and the special features of ANSI COBOL language are thoroughly covered. Emphasis is placed on multi-dimensional table handling, searching and sorting techniques, and VSAM (Indexed) file manipulation. Structured design and programming will be stressed. Programming assignments will require detailed knowledge of necessary Job Control Language (JCL) for program execution. Prerequisites: COSC 1404, 2403, and 2404.

- COSC 2402 Systems in the MIS Environment (3-3) Credit: 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 database management systems through the development of a data base project. Prerequisite: 12 semester hours in Computer Science.
- COSC 2403 Operating Systems and Job Control Language (3-3) Credit: 4**
 A study of computer operating system concepts including major software components and their functions. An in-depth coverage of Job Control Language and/or command language. Use of utilities for data set maintenance and manipulation of system control information. Prerequisites: COSC 1404 and 1406 or COSC 1400, 1401, and concurrent enrollment in COSC 1406.
- COSC 2404 Machine Language Operations (3-3) Credit: 4**
 Assembly and machine language concepts. Emphasis on a bend resolution and dump reading. Competencies will be developed through programming assignments. Prerequisite: COSC 1404 and 1406.
- COSC 2406 Database Programming (3-3) Credit: 4**
 A study of the DB2 relational database management system under MVS on an IBM mainframe. Topics include SQL, data manipulation, data definitions, and the Query Management Facility (QMF). Students will code application programs in COBOL with embedded SQL. Prerequisite: 16 semester hours in Computer Science including COSC 1404.
- COSC 2408 CICS Programming (3-3) Credit: 4**
 An introduction to programming for the teleprocessing environment under CICS. Applications will be written and tested on-line. Prerequisites: COSC 1404 and 2404.
- COSC 2409 Field Projects (1-9) Credit: 4**
 This course consists of practical applications in the field of computer science. It is designed to fit the career objectives of the student. Prerequisite: Consent of the Department Chair.
- COSC 2410 Systems Analysis and Design (3-3) Credit: 4**
 Study of structured systems development using a computer-aided systems engineering (CASE) tool. Emphasis on tools and techniques of systems analysis and design for producing logical methodologies for dealing with complexity in the development of information systems. Prerequisite: COSC 1405 and 8 semester hours of programming.
- COSC 2490 Computer Resource Management (3-3) Credit: 4**
 This course covers the procurement, use and evaluation of computer resources including hardware, software, and people. Topics include capacity planning, upgrades, downsizing, choosing the correct hardware and software, compatibility, connectivity, and vendor vs. in-house support. Prerequisite: MISC 1461.
- COSC 2491 Network Management (3-3) Credit: 4**
 An in-depth study of LAN software designed to prepare individuals for the responsibility of being a LAN system manager. Students will learn to create workable directories, create scripts for a working environment, design menus for novice users, select applications, and set up network printing and backups. Prerequisite: MISC 1461.
- COSC 2492 Network Installation, Service & Support (3-3) Credit: 4**
 A study of LAN hardware management. Students will set up various types of file servers and work stations; configure and install network boards; install multiple cabling systems; and be able to isolate, diagnose, and troubleshoot LANs. Students will gain practical experience configuring and installing LANs. Prerequisite: COSC 2491.
- COSC 2493 Network Architectures, Standards & Protocols (3-3) Credit: 4**
 A practical introduction to the major industry networking and data communications standards and protocols. This hands-on course will guide students through the installation, maintenance, error detection, and internals of communications protocols. Connectivity among a wide variety of computer platforms will be stressed. Prerequisite: COSC 2491.

COSC 2494 Computer Science Internship**(1-20) Credit: 4**

This course consists of on-the-job computer training that utilizes the principles, knowledge and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College coordinator. Prerequisite: 32 semester hours in Computer Science courses and consent of the Department Chair.

(CRIJ) CRIMINAL JUSTICE**CRIJ 1201 Defensive Tactics****(1-2) Credit: 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) Credit: 3**

History, development, and philosophy of law enforcement and criminal justice in a democratic society. Introduction and career orientation to the multifaceted agencies involved in the administration of criminal justice.

CRIJ 1302 Criminal Investigation I**(3-0) Credit: 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) Credit: 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) Credit: 3**

The judiciary in the criminal justice system, structure of America 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) Credit: 3**

This course is designed to cover all laws pertaining to the control and enforcement of traffic. The student is taught the use of spot maps and charts, the techniques of enforcement, and the maintenance of good public relations. An analysis of the Model Motor Vehicle Code is given.

CRIJ 1306 Correctional Systems and Practices**(3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 3**

Modern methods and skills required for criminal investigation including discovery methods, development 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) Credit: 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 (2.5-5) Credit: 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 by 72nd Texas Legislature.
- CRIJ 1314 Community Resources in Corrections (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 3**
This course will provide the student with some understanding of the criminal evolution of corrections and explore with the student the many avenues into which the corrections field branches. Develops in each student a basic understanding of the various methods of corrections so that they may function efficiently in the field.
- CRIJ 2303 Criminal Justice Seminar (3-0) Credit: 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 in courses dealing with different problems and issues.
- CRIJ 2304 Juvenile Procedures (3-0) Credit: 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) Credit: 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 2308 Patrol Administration (3-0) Credit: 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) Credit: 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 (2.5-5) Credit: 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.

(DIEM) DIESEL MECHANICS

DIEM 1301 Diesel Engine Fundamentals (2-3) Credit: 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) Credit: 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) Credit: 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) Credit: 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 1405.

DIEM 2400 Hydraulic Systems Fundamentals & Service (3-3) Credit: 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) Credit: 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) Credit: 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 1404 and 2400 or AUTO 1408.

DIEM 2405 Advanced Diesel Engine Service (3-3) Credit: 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 pump service and calibration. The student will perform a tune-up on various diesel engines, remove and install fuel injection pumps and injectors, adjust governors, and disassemble, clean, inspect, reassemble and calibrate fuel injection pumps. 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) Credit: 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 injector and nozzle service. The student will remove, test, disassemble, clean, repair, reassemble and install fuel injectors and nozzles. Prerequisite: DIEM 1301.

DIEM 2407 Diesel Engine Cylinder Head Service (3-3) Credit: 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.

(DRDS) DRAFTING AND DESIGN

DRDS 1303 Architectural Blueprint Reading (2-2) Credit: 3

The fundamentals of blueprint reading for the construction trades. This course includes familiarization with standard terms, sizes, estimations and commercial practices.

DRDS 1400 Fundamentals of Drafting (2-4) Credit: 4

An overview of drafting to include shape and size description lettering, geometric construction, multi-view projection dimensioning, pictorial drawings, copy reproduction, and the use of equipment essential to the field of drafting.

DRDS 1402 Technical Illustration (3-3) Credit: 4

Introduction to pictorial drawings as used in industrial catalogs, assembly sheets, newspaper publications, and promotional literature. Work to be done in various media to include pencil, ink, transfer tapes, and air brush. Prerequisite: ENGR 1304 or DRDS 1405, or concurrent enrollment.

DRDS 1403 Machine Drawing (2-4) Credit: 4

Drawing and manufacturing processes; training in producing various kinds of advanced drawings; commercial practices, and economics; the use of standard parts, sizes, symbols and abbreviations. Prerequisites: ENGR 1304 or DRDS 1405, ENGR 1305 or DRDS 1406, or concurrent enrollment.

DRDS 1404 Structural Drafting (2-4) Credit: 4

A study of the AISC specifications and standards; structural theory and data, designing and detailing structural members and connections. Design and development of details and specifications for light industrial structures to include structural steel, pipe, and reinforced concrete. Prerequisite: ENGR 1304 or DRDS 1405, ENGR 1305 or DRDS 1406, or concurrent enrollment.

DRDS 1405 Technical Drafting (2-4) Credit: 4

Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projections drawings, geometry and graphical construction.

DRDS 1406 Applied Descriptive Geometry (2-4) Credit: 4

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 or DRDS 1405.

DRDS 1410 Computer-Aided Drafting I (2-4) Credit: 4

A course designed to introduce the computer to the drafting student as another means of preparing detailed drawings. Emphasis is placed on equipment familiarization, graphics/terminal functions, and the application of computer graphics to the development of drawings to the standards set by industry. Prerequisites: Second semester Freshman standing in the Drafting Program and consent of the Department Chair.

DRDS 2350 Applied Statics I (3-0) Credit: 3

A study of the principles of mechanics of rigid bodies in equilibrium with emphasis in the areas of friction, centroids, center of gravity, and moments of inertia.

DRDS 2351 Applied Statics II (3-0) Credit: 3

A continuation of Applied Statics I. This course covers the application of knowledge and skills relative to the stability of structures and safe loads that can be carried by girders. Activities include computation of the center of gravity of an object when given the appropriate information, a discussion of the variety of materials used and their strengths, and brief practices on designed equilibrium tools and mechanisms.

DRDS 2401 Pipe Drafting (2-4) Credit: 4

Design and detailing of pipe systems make use of standard practices and symbols; includes single-line, double-line, plan profile, and isometric drawings of pipe systems. Using the computer to produce drawings is encouraged. Prerequisite: Sophomore standing in the Drafting Program.

DRDS 2402 Architectural Drafting (2-4) Credit: 4

A study of the preparation of architectural plans, elevations, sections, site plans, various building details, room finish, door, and window schedules, and structural drawings. Using the computer to produce drawings is encouraged. Prerequisite: Sophomore standing in the Drafting Program.

DRDS 2403 Electronic Drafting (2-4) Credit: 4

A study of layout and preparation of finished electronic and electrical drawings stressing modern representation used for pictorial drawing, wiring and correction diagrams, printed circuits, control circuits, and schematic diagrams. Using the computer to produce drawings is encouraged. Prerequisite: Sophomore standing in the Drafting Program.

DRDS 2404 Principles of Design (3-3) Credit: 4

Theory and practice of design as related to engineering and technology. Analysis in the areas of architecture, machine design, structural design, and product development. Using the computer to produce drawings is encouraged. Prerequisite: Second semester Sophomore standing in the Drafting Program.

DRDS 2405 Civil Design Drafting (3-3) Credit: 4

Drafting problems and techniques in civil engineering projects including key maps, drainage, plans and profiles, typical roadway cross-sections, earthwork, land development and surveying. Using the computer to produce drawings is encouraged. Prerequisite: Second semester Sophomore standing in the Drafting Program.

DRDS 2406 Industrial Practice (1-5) Credit: 4

This course is designed to give specialized practice to the student in his major field of interest. All work done in this class will typify actual industrial projects. The student will also complete an employment resume, cover letter, and portfolio. All projects will be completed with the use of Computer-Aided Drafting (AUTOCAD). Prerequisite: Second semester Sophomore standing in the Drafting Program.

DRDS 2411 Computer-Aided Drafting II (2-4) Credit: 4

This course is a continuation of DRDS 1410. Emphasis will be placed on the use of the AUTOCAD system as a design and problem-solving instrument. The student will select problems from the drafting field of his choice. Prerequisite: DRDS 1410 and consent of the Department Chair.

(DS--) DEVELOPMENTAL STUDIES

DSCO 0300 Developmental Communication (1-2) Credit: 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) Credit: 1

This course is designed to assist the student in developing critical thinking and work place skills; in academic planning using the Central Texas College Catalog, semester schedule, and other academic documents in developing research skills common to all academic disciplines; and in making adequate personal and social adjustments to college life. This course also acquaints the student with Central Texas College policies, services, and activities.

- DSED 0101 Study Skills (1-0) Credit: 1**
Techniques of study such as time management, listening and notetaking, text marking, library and research skills, preparing for examinations, and utilizing learning resources.
- DSED 0300 College Study Skills (3-0) Credit: 3**
Designed for improvement of study systems. Emphasis is placed on high-level study skills and the improvement of time management, effective listening and notetaking, marking tests, learning through media, concentration, retention of information, and taking examinations.
- DSED 0301 College Study Skills and TASP (1-2) Credit: 3**
This course is designed to provide an opportunity for students to learn and adopt new methods of becoming successful in school and life. Emphasis is placed on high-level study skills and the improvement of time management, effective listening and notetaking, learning through media, concentration, retention of information, taking examinations, creativity, and life relationships.
- DSED 0302 College Study Skills for Foreign Students (TOEFL Prep) (3-0) Credit: 3**
This is a study skills course designed specifically for the foreign student whose first language is not English and/or the student who wishes to prepare for the TOEFL (Test of English as a Foreign Language) required for entry into most college-level institutions.
- DSLA 0310 Reading and Vocabulary I (ESL) (3-2) Credit: 3**
This course is designed for speakers of languages other than English with TOEFL scores below 400. The primary objectives are to develop reading fluency, increase vocabulary, and prepare the students to function in an academic environment.
- DSLA 0314 Writing I (ESL) (3-2) Credit: 3**
This course is designed for speakers of languages other than English with TOEFL scores below 400 and students with limited English proficiency. The objective is to develop writing skills including organization of ideas and application of grammar necessary to form well-developed sentences and paragraphs.
- DSLA 0315 Grammar I (ESL) (3-1) Credit: 3**
This course is designed for speakers of languages other than English with TOEFL scores below 400. The objective of the intermediate-level grammar course is to develop standard English usage with emphasis on well-developed sentences.
- DSLA 0316 Listening Comprehension I (ESL) (3-2) Credit: 3**
This course is designed for speakers of languages other than English with TOEFL scores below 400. The primary objectives are to develop aural comprehension of specific conversational patterns in the areas of surface, implied, and inferred meaning.
- DSLA 0317 Speaking I (ESL) (3-1) Credit: 3**
This course is designed for speakers of languages other than English with TOEFL scores below 400. The primary objectives are to move students from recognition of language to oral production. The emphasis is on pronunciation and dialogue.
- DSLA 0318, 0319 English for Foreign Students I & II (ESL) (3-2) Credit: 3,3**
Speaking, listening, reading, and writing for students whose native language is not English. Intended to aid foreign students in attaining greater ease in the use of the English language. (Previously numbered ENGL 0303 and 0304 respectively.).
- DSLA 0320 Reading and Vocabulary II (ESL) (3-2) Credit: 3**
This course is designed for speakers of languages other than English with TOEFL scores above 400. The objectives are to develop reading fluency, build vocabulary, and prepare students to function in an academic environment. This course includes various techniques for becoming a better student in English.

DSLA 0321 Writing II (ESL) (3-2) Credit: 3

This course is designed for speakers of languages other than English with TOEFL scores above 400. The objectives are to develop writing skills, standard English usage, organization of ideas and application of grammar.

DSLA 0322 Academic Listening & Speaking II (ESL) (3-2) Credit: 3

This course is designed for speakers of languages other than English with TOEFL scores above 400. The objectives are to develop beginning notetaking and speaking skills which will prepare students to function in an academic environment.

DSLA 0330 Reading and Vocabulary III (ESL) (3-2) Credit: 3

This course, a continuation of DSLA 0320, provides further study in vocabulary, comprehension skills, and organizational patterns such as cause/effect, description, and comparison/contrast as they apply to writing compositions. Prerequisite: DSLA 0320.

DSLA 0332 Academic Listening & Speaking III (ESL) (3-2) Credit: 3

This course is designed for entering freshmen. The primary objectives are to improve notetaking and oral reporting abilities which will prepare students for college-level course work.

DSMA 0100 Mathematics Laboratory I (0-1) Credit: 1

This course provides a setting for students to develop and expand mathematical skills in a laboratory setting under the guidance of an instructor. This laboratory may be used with any basic or developmental mathematics.

DSMA 0101 Basic Developmental Mathematics (1-1.5) Credit: 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) Credit: 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 0111 Basic Mathematics I (2-0) Credit: 1

This course covers basic arithmetic calculations such as adding, subtracting, multiplying, and dividing fractions, decimals, and integers.

DSMA 0112 Basic Mathematics II (2-0) Credit: 1

This course covers basic algebraic operations such as operations on real numbers, polynomials, linear equations, and factoring.

DSMA 0113 Basic Mathematics III (2-0) Credit: 1

This course is a continuation of DSMA 0112. It includes ratio and proportion, graphs, linear equations, inequalities, radical expressions, and quadratic equations.

DSMA 0300 Developmental Mathematics I (5-1) Credit: 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) Credit: 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).

DSMA 0302 Fundamentals of Mathematics I (3-0) Credit: 3

This course includes operations with common fractions, decimals and positive integers; order of operations; prime factorizations; 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) Credit: 3
This course presupposes the knowledge gained in DSMA 0301. Topics include operations with rational expressions, linear equations, systems of linear equations, radical expressions, complex numbers, quadratics, and functions. A laboratory is required.
- DSMA 0304 Fundamentals of Mathematics II** (3-0) Credit: 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.
- DSMA 0306 Intermediate Algebra I** (3-0) Credit: 3
This course presupposes that the student has successfully completed DSMA 0304 or has equivalent knowledge. Topics include a review of factoring, rational expression, radical expressions, complex numbers, radical equations, quadratics and the study of the parabola.
- DSMA 0307 Intermediate Algebra II** (3-0) Credit: 3
This course presupposes that the student has successfully completed DSMA 0306. 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.
- DSMA 0308 Pre-College Math** (3-0) Credit: 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.
- DSRE 0100 Developmental Reading Laboratory** (0-1) Credit: 1
This course provides a setting for students to develop and expand reading skills in a structured environment under the guidance of an instructor.
- DSRE 0101 Developmental Reading Laboratory** (0-1) Credit: 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.
- DSRE 0111 Basic Reading I** (1-0) Credit: 1
This course improves reading skills, vocabulary, and reading comprehension/rate.
- DSRE 0112 Basic Reading II** (1-0) Credit: 1
This is a continuation of DSRE 0111 and emphasizes vocabulary development, comprehension, and fluency.
- DSRE 0113 Basic Reading III** (1-0) Credit: 1
This is a continuation of DSRE 0112.
- DSRE 0300 Developmental Reading I** (2-2) Credit: 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.
- DSRE 0301 Developmental Reading II** (2-2) Credit: 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.
- DSRE 0302 Fundamentals of Reading I** (3-0) Credit: 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 many of the objectives of DSRE 0300 without the additional laboratory reinforcement.)

DSRE 0303 fundamentals of Reading II (3-0) Credit: 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 many of the objectives of DSRE 0301 without the additional laboratory reinforcement.)

DSSP 0300 Developmental Speech (1-2) Credit: 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.

DSWR 0111 Basic Writing I (1-0) Credit: 1

This course covers basic composition skills such as idea generation, organization, style, use of standard English, and revision.

DSWR 0112 Basic Writing II (1-0) Credit: 1

This course is a continuation of DSWR 0111 and emphasizes the correct use of grammar, organization, and style.

DSWR 0113 Basic Writing III (1-0) Credit: 1

This course is a continuation of DSWR 0112.

DSWR 0301 Developmental Writing I (3-1) Credit: 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).

DSWR 0302 Developmental Writing II (3-1) Credit: 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).

DSWR 0303 Fundamentals of Writing I (3-0) Credit: 3

Fundamentals of Writing I is a course in basic writing skills at the sentence and paragraph levels. Course includes instruction in basic grammar, sentence structure, punctuation, and other necessary skills leading to the proper construction of a paragraph.

DSWR 0304 Fundamentals of Writing II (3-0) Credit: 3

This course is a continuation of DSWR 0303 and emphasizes composition skills at the paragraph and essay levels. Includes a study of sentence-level grammar and punctuation and presents the organizational skills needed to write a basic essay.

(ECON) ECONOMICS

ECON 1303 Consumer Economics (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 a power formula. AC topics include power generation, inductive and capacitive, waveform types, and voltage measurements. It also includes the study and use of analog and digital multimeters.

ELTE 1402 Electrical Circuits II**(3-3) Credit: 4**

The second course in the study of electrical circuitry. This course includes AC circuit topics such as single- and poly-phase systems, 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) Credit: 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) Credit: 4**

A study of those basic circuits used throughout industry today. Prerequisite or Corequisite: ELTE 1403.

ELTE 1406 Mobile Security Systems**(3-3) Credit: 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) Credit: 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) Credit: 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) Credit: 3**

The operation, preventive maintenance procedures, and troubleshooting of modern-day radio and television broadcast equipment. The course gives the student that 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) Credit: 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) Credit: 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) Credit: 4**
Includes the use and normal user calibration techniques for all phases of Electronic Test Equipment from the very simplest to the most advanced. Prerequisite: ELTE 403.
- ELTE 2403 Home Security Systems (3-3) Credit: 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) Credit: 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) Credit: 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) Credit: 4**
An advanced study of the many types of 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 & Repair (3-3) Credit: 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: CMET 1409 and consent of the Department Chair.

(EMET) EMERGENCY MEDICAL TECHNICIAN

- EMET 1101 Basic Life Support and Emergency Care (1.5-0) Credit: 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) Credit: 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 & ECG Interpretation (1-0) Credit: 1**
The anatomy and physiology of the cardiovascular and respiratory systems. Includes pathophysiology of heart disease, ECG theory, and interpretation of dysrhythmias. § Prerequisite: EMET 1502 or other medical training.
- EMET 1104 Introduction to Basic Science for the Paramedic (1-0) Credit: 1**
Prepares the student to take the basic science portion of EMET 2404. 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) Credit: 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) Credit: 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 1502 or other medical training.
- EMET 1107 Shock: Concepts and Treatment (MAST and IV Infusion) (1-0) Credit: 1**
Pathological 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 1502 or other medical training.
- EMET 1108 Laboratory Techniques and IV Therapy (1-0) Credit: 1**
Uses of and indications for IV therapy. Types of solution and equipment needed; techniques for starting IVs and for venipuncture. § Prerequisite: EMET 1502 or other medical training.
- EMET 1109 Basic Auto Extrication (1-0) Credit: 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 1502 or other medical training.
- EMET 1110 Emergency Airway Management (1-0) Credit: 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 1502 or other medical training.
- EMET 1111 EMT Medical and Environmental Emergencies (1-0) Credit: 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 1502 or other medical training.
- EMET 1112 EMT Obstetrical and Pediatric Emergencies (1-0) Credit: 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) Credit: 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) Credit: 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 1502 or other medical training.

EMET 1115	AIDS & Infectious Diseases for Emergency Responder	(1-0)	Credit: 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 Herpetic Whitlow. § Prerequisite: EMET 1502 or other rescue training.			
EMET 1116	Crisis Intervention and Management	(1.5-0)	Credit: 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)	Credit: 1
Management techniques and emergency treatment of individuals who have overdosed on drugs or alcohol.			
EMET 1118	Crisis Intervention: Victims of Violence	(1-0)	Credit: 1
Management techniques and emergency treatment of victims of violence.			
EMET 1119	Crisis Intervention: Rape	(1-0)	Credit: 1
Management techniques and emergency treatment of rape victims.			
EMET 1120	Crisis Intervention: Spouse Abuse	(1-0)	Credit: 1
Management techniques and emergency treatment of victims of spouse abuse.			
EMET 1121	Crisis Intervention: Child Abuse	(1-0)	Credit: 1
Management techniques and emergency treatment of victims of child abuse.			
EMET 1122	Crisis Intervention: Eating & Food-Related Emergencies	(1-0)	Credit: 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)	Credit: 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)	Credit: 1
Consideration of acute injury and illness caused by recreational physical exercise.			
EMET 1125	EMT Crisis Intervention: Abuse, Rape, & Suicide	(1-0)	Credit: 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)	Credit: 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) EMT-Basic Certification.			
EMET 1202	Combat Lifesaver Course	(2-1)	Credit: 2
Trains combat soldiers to supplement military medics in a variety of lifesaving tasks and related medical care.			
EMET 1302	Military Medicine	(2-2)	Credit: 3
This course increases the military medic's ability to provide pre-hospital care in an isolated environment and prepares the medic in military-specific subjects such as specialty extraction and evacuation; battlefield triage; nuclear, biological, and chemical casualty management; preventive medicine; field hygiene and sanitation; as well as specific medical support procedures such as radio telephone. Portions of this course may be used to satisfy the National Registry requirements for continuing education. Prerequisite: EMET 1502 or equivalent of MOS 91A, 91B, 91C (Army), HM-0000, HM-8404 (Navy), 902-series (Air Force).			

- EMET 1303 First Responder (2-1) Credit: 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) Credit: 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) Credit: 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 1403 Emergency Medical Technician - Recertification (3-3) Credit: 4**
 Covers all didactic and practical experiences covered in EMET 1302 and 1502. Through National Registry approval, this course provides the necessary continuing education, CPR, and refresher training requirements needed for national recertification. Prerequisite: EMET 1502 or EMT Certification.
- EMET 1502 Emergency Medical Technician - Ambulance (3-4) Credit: 5**
 This course exposes the student to the didactic and practical experiences outlined in the 1993 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.
- EMET 2101 Introduction to Paramedic (1-0) Credit: 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 1502.
- EMET 2301 Disaster Planning (3-0) Credit: 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) Credit: 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) Credit: 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 2504 Introduction to Paramedic Medicine (4-4) Credit: 5**
 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 1502.

§ 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) Credit: 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) Credit: 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) Credit: 3

Instruction in grammar and diction, writing expository papers, writing effective business correspondence and reports, and oral presentations.

ENGL 1313 College Reading (2-1) Credit: 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) Credit: 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 1312.

ENGL 2322 English Literature I (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 1

Introduction to all engineering fields and the opportunities within the scope of professional work.

ENGR 1304 Engineering Graphics (2-4) Credit: 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) Credit: 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.

(FIBA) FINANCE AND BANKING**FIBA 1301 Banking Principles****(3-0) Credit: 3**

The fundamentals of bank functions presented in a descriptive fashion allowing the beginning banker to acquire a broad, operational perspective. It reflects the radical changes in banking policy and practice which have occurred in recent years. Topics covered are banks and the monetary system, negotiable instruments, the relationship of the financial institution to its depositors, types of accounts, the deposit function, the payments function, loans and investments, other services (trusts, international and safe deposit), accounting and marketing, internal and external controls, and the public service obligations of banks.

FIBA 1302 Money and Banking**(3-0) Credit: 3**

The economic principles most closely related to the subject of money and banking in a context of topics and interest to present and prospective financial institution management. The practical application of the economics of money and banking to the individual financial institution is stressed. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money; banks and money supply; cash assets and liquidity management; investments, loans, earnings and capital; the Federal Reserve and its policies and operations, Treasury Department operations; and the changing international monetary systems.

FIBA 1303 Credit Department Management**(3-0) Credit: 3**

The primary objective of this course is to provide usable material for small- and medium-sized financial institutions to strengthen their performance of the commercial lending function. It includes an analysis of the essential elements of the credit function, a discussion of key operations and training areas, and information on types of functional or departmental organization which can be used to carry out the required tasks.

FIBA 1304 Residential Mortgage Underwriting**(3-0) Credit: 3**

This course teaches the student the importance of the underwriting decision and how to logically evaluate both the borrower and the property. All elements that enter into the decision-making process are covered. Subjects include, but are not limited to, income analysis, financial statement analysis of the self-employed person, fundamentals of residential property appraisal and property standards.

FIBA 1305 Law and Banking Principles**(3-0) Credit: 3**

This course serves as a guide to law and legal issues with special emphasis on the Uniform Commercial Code. Subjects include the sources and applications of banking law, torts and crimes, contracts, real and personal property, bankruptcy, and the legal implications of consumer lending. It is designed for entry- and office-level personnel in the financial services industry who require an overview of the legal aspects of banking.

FIBA 1306 Deposit Operations**(3-0) Credit: 3**

This course provides an overview of the United States payments system, banking law and regulation, and current industry practices regarding deposit operations. Topics include the regulatory and procedural framework within which banks operate, the check collection and payment process, check processing risks for banks, electronic funds transfer systems, and cash management services.

FIBA 2301 Federal Regulations of Banking**(3-0) Credit: 3**

Some of the topics covered are agencies regulating financial institutions, bank charters, reports and examinations, federal limitations on financial operations, and the regulation of expansion. Emphasis is on supervision rather than the role of the Federal government as it directly influences the operations of financial institutions through fiscal and monetary policy decisions.

FIBA 2302 Bank Management (3-0) Credit: 3

This course presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management's supervisory role.

FIBA 2303 Marketing for Bankers (3-0) Credit: 3

This course covers the concepts and philosophies of marketing; marketing information, research and target; the marketing mix (product strategy, distribution strategy, advertising and sales promotion, personal selling and pricing strategy), and the methods of marketing planning.

FIBA 2304 Consumer Lending (3-0) Credit: 3

Emphasizes the pragmatic "how-to" details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing financial services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance and rate structure and yields.

FIBA 2305 Investment Principles (3-0) Credit: 3

Covers the sources and uses of bank funds and the place of investment in the overall scheme of bank operations. Especially important are the relationships of investments to business and the unique functions, advantages, and purposes served by a wide range of securities. Investment terminology is covered in detail.

FIBA 2306 Analyzing Financial Statements (3-0) Credit: 3

This course includes characteristics of financial statements and financial statement analysis. Goals, methods, and tools of analysis; profit and loss analysis, accounts receivable, inventories and balance sheets, the relationship of balance sheet accounts to sales, and projected statements of cash budgets are studied. Prerequisite: ACCT 2301 or ACTE 1301.

(FPRT) FIRE PROTECTION TECHNOLOGY

FPRT 1301 Fundamentals of Fire Protection (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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 relation 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) Credit: 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) Credit: 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) Credit: 3**
A continuation of FPRT 1307. Prerequisite: FPRT 1307.
- FPRT 2301 Industrial Fire Protection I (3-0) Credit: 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 situation and prevention methods. Gaining cooperation between the public and private fire department organization. Study of elementary industrial fire hazards in manufacturing plants. Prerequisite: FPRT 1301.
- FPRT 2302 Industrial Fire Protection II (3-0) Credit: 3**
Development of fire and safety organizations in industry; relation 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 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 Material I (3-0) Credit: 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) Credit: 3**
A study of legal rights and duties, liability concerns and responsibilities of the fire department while carrying out their 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 fire fighters, fire departments and municipalities.
- FPRT 2305 Building Codes and Construction (3-0) Credit: 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) Credit: 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 fire fighters and arson investigators and other related topics. Prerequisite: FPRT 2305.

FPRT 2308 Hazardous Materials II (3-0) Credit: 3

Hazardous materials covering storage, handling laws, standards, and fire-fighting 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) Credit: 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) Credit: 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 fire-fighting techniques, special equipment and fire safety as they relate to watercraft.

FPRT 2314 Fire Service Hydraulics (3-0) Credit: 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 stationery fire pumps; the trajectory and patterns of fire streams; and the relationship between fixed and mobile fire suppression equipment.

FPRT 2404 Fire-Fighting Tactics and Strategy (4-0) Credit: 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 of, or registration therein of, all other required FPRT courses.

(FREN) FRENCH

FREN 1411 Beginning French I (4-2) Credit: 4

This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

FREN 1412 Beginning French II (4-2) Credit: 4

Elementary grammar is completed. Pronunciation, drill, and conversation based on reading are continued. Common conversational phrases are stressed. Prerequisite: FREN 1411.

FREN 2311 Intermediate French I (3-0) Credit: 3

This course includes grammar review, composition, and reading of French masterpieces, with conversation based on material read. Prerequisite: FREN 1411, 1412 or two years of French in an accredited high school.

FREN 2312 Intermediate French II (3-0) Credit: 3

This course continues reading of French masterpieces; drill on syntax as needed for reading, composition, and conversation. Prerequisite: FREN 2311.

(FSMG) FOOD SERVICE MANAGEMENT

FSMG 1300 Quantity Food Production (3-0) Credit: 3

An introductory course in culinary skills. Covers basic institutional food preparation. Emphasizes the use of equipment and tools common to an institutional food service kitchen. Stresses the human relations challenges inherent to large food service programs.

FSMG 1301 Supervising Kitchen Administration (3-0) Credit: 3

A study of the supervisory procedures necessary to control food and beverage operations including supervision of the preparation crew. Primary emphasis is placed on weights and measures, portion control, conversion of standard recipes, and production formulas. Secondary emphasis is placed on daily food production reports, taxes, reports to all levels of government, and the metric system. Prerequisite: Math placement test score of 180 or above, or successful completion of DSMA 0300 (or equivalent), or consent of the Department Chair.

FSMG 1302 Nutrition § (3-0) Credit: 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.

FSMG 1303 Sanitation and Safety § (3-0) Credit: 3

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) sanitation examinations.

FSMG 1304 Work Organization (3-0) Credit: 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 processes and work distribution methods, quantity and quality control planning, and the current impact of governmental guidelines upon such procedures.

FSMG 1305 Food Purchasing § (3-0) Credit: 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.

FSMG 1306 Menu Planning § (3-0) Credit: 3

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.

FSMG 1307 Meat Science § (3-0) Credit: 3

An introductory course in raising, slaughtering, and packing meats, fish, and poultry including an intensive study of wholesale and retail cuts of beef, veal, pork, and lamb. Emphasis is placed on the knowledge of grades, bone structure, muscle configuration, and appropriate cooking methods of hotel and restaurant meat cuts.

FSMG 1308 Restaurant Merchandising (2-3) Credit: 3

Sales promotion, interior decor, types and uniformity of service, food and beverage display, menu and room styling.

FSMG 1309 Short-Order Food Preparation (1-6) Credit: 3

Introduction to short order food preparation including basic equipment, tools, and preparation techniques necessary to qualify a student to efficiently operate a short-order food station serving large numbers of customers quickly.

FSMG 1401 Food Preparation and Serving (3-3) Credits: 4

An introduction to food preparation techniques. Includes preparation of vegetables, pastries, oven dishes, soups, salads, meats, fish, and poultry. Techniques include experimental cookery, food marketing and preservation, serving and table service. Prerequisite: FSMG 1303 or consent of the Department Chair.

FSMG 1402 Basic Baking and Pastry Production (2-6) Credit: 4

This is an introductory course in baking and pastry production in a commercial food service establishment or in a bakery. Students learn how to properly use the tools and equipment used in baking; make breads, yeast-raised dough products, fired bakery products (donuts and crullers), variety pies, layer cakes and cupcakes, puff pastries, variety cookies; and how to decorate cakes and pastries.

- FSMG 2150 Food Purchasing and Financial Management (1.3-1.3) Credit: 1**
Preparing financial statements; food pricing, quality, and quantity; purchasing; and controlling food costs.
- FSMG 2151 Nutrition and Menu Planning (1.5-1.5) Credit: 1**
Nutrition and menu planning in the food service industry.
- FSMG 2201 Food Service Terminology (2-0) Credit: 2**
This course is an introduction to the terminology utilized in the food service industry.
- FSMG 2250 Advanced Culinary Skills (1-3) Credit: 2**
This course is designed to give fine points of culinary skills and theory. It covers the preparation of classical food menus and the art of serving food.
- FSMG 2251 Culinary Skills (2-2) Credit: 2**
Culinary Skills introduces the student to the methods, techniques, and terminology needed to effectively manage a quality food kitchen.
- FSMG 2252 Nutrition and Physical Fitness (2.5-0) Credit: 2**
The relationship between proper nutrition and physical fitness. Lectures deal with calorie consumption, apathy, self-discipline, performance, and other character deficiencies related to obesity and physical fitness.
- FSMG 2303 Cafeteria Management § (3-0) Credit: 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: FSMG 1301 or MATH selection.
- FSMG 2304 Hospitality Industry Sales Promotion § (3-0) Credit: 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.
- FSMG 2306 Layout and Design (3-0) Credit: 3**
Fundamentals of equipment layout for optimum production and operational efficiency. This course will include procedures to design and decorate remodeling projects.
- FSMG 2353 Creative Cooking (2-3) Credit: 3**
Creative cooking is the art of combining creativity and design with superior food preparation and serving. The art of "Garde Manger" is taught. Prerequisite: FSMG 1303.
- FSMG 2355 Kitchen Management and Food Servicing (2.5-2.5) Credit: 3**
This course introduces the student to the methods, techniques, and terminology needed to effectively manage a quality food kitchen.
- FSMG 2356 Gourmet Cooking (2-3) Credit: 3**
Gourmet Cooking introduces the student to the art of cooking as practiced by professional master chefs. Prerequisite: FSMG 1303.
- FSMG 2401 Classical Food Preparation (3-3) Credit: 4**
This course emphasizes the fine points of culinary skills and theory. Concentration is on menu preparation. Responsibilities of the Chef and Sous-Chef.
- FSMG 2402 Exhibition Work (3-3) Credit: 4**
Taught in conjunction with FSMG 2401, this course is designed to assist the student in professional employment. The essence of exhibition, buffets, centerpieces, and the role of the Executive Chef will be emphasized. This course will include an exhibition planned and prepared by the student.

FSMG 2405 Management Practice I § (1-20) Credit: 4

This course consists of on-the-job management training that utilized the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student is employed at an approved work site in the food service industry under the supervision of a College coordinator. Prerequisite: Sophomore standing and consent of the Department Chair.

FSMG 2406 Management Practice II § (1-20) Credit: 4

This course consists of on-the-job management training that utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student is employed at an approved work site in the food service industry under the supervision of a College coordinator. Prerequisite: FSMG 2405 and consent of the Department Chair.

FSMG 2452 The Chef's Course (2.5-2.5) Credit: 4

This course is designed to develop a combination of good management practices, food preparation expertise and artistic creativity in laboratory exercises in food preparation. Students will be required to prepare and serve a buffet meal.

FSMG 2453 Dining Facility Management (2.5-4) Credit: 4

This course is designed to provide food service personnel with the technical knowledge and skills to manage and operate a unit or consolidated dining facility under garrison or field conditions.

§ Nationally certified course. Students must pass the national certification examination to receive credit for this course.

(GART) GRAPHIC ARTS TECHNOLOGY

GART 1401 Elementary Design (3-3) Credit: 4

Introduction to the fundamentals of design leading to the discovery and comprehension of the visual language. Form, balance, structure, rhythm, and harmony are studied in black and white and in color. Various media are used. A foundation is laid for advanced courses in design.

GART 1402 Introduction to Desk Top Publishing (3-3) Credit: 4

This course covers the basic operations of desk top publishing including the computer, printer, scanner, modem, and software. It also covers the use of desk top publishing in the preparation of brochures, booklets, and advertisements.

GART 1403 Production Art I (3-3) Credit: 4

This course provides introductory principles and skills of preparing camera-ready art for offset reproduction with an overview of the other printing processes. Basic technical drawing skills, type specification/copyfitting, color/multicolor mechanical art are studied. Introduction to four-color process, ink, and paper specification.

GART 1404 Advanced Desk Top Publishing (3-3) Credit: 4

This course emphasizes computer aided design art and typography for commercial printing. It combines the computer designed art and typesetting capabilities of desk top publishing to produce camera ready copy. Prerequisites: GART 1401 and 1402.

GART 1405 Production Art II (3-3) Credit: 4

This course covers advanced principles and skills of preparing camera-ready art for off-set reproduction with an overview of the other printing processes. Color separation, special effects, stages of the production process, printing economy and comprehensive application of printing papers are studied. Prerequisite: GART 1403.

GART 1406 Graphic Design I (3-3) Credit: 4

This course is a study of design and conceptualization through problems pertaining to publications, advertising, and television. It emphasizes relating form to content through selection, creation, and integration of typographic, photographic, illustrative, and design elements. Prerequisites: GART 1401 and 1403.

GART 1407 Typographic Design (3-3) Credit: 4

This course is a basic study of the visual form and the recognition of type styles and letter forms that relate to graphic design and communication. It also discusses visual understanding of the moods of type and choosing type styles most suited to the layout. Prerequisite: GART 1401.

GART 1408 Graphic Design II (3-3) Credit: 4

This course is advanced study of design, conceptualization, and art direction through problems pertaining to publications, advertising, and television. Emphasizes relating form to content through selection, creation, and integration of typographic, photographic, illustrative, and design elements. Prerequisite: GART 1406, 1407, or concurrent enrollment.

(GEOG) GEOGRAPHY

GEOG 1300 Introduction to Geography (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 3

The earth as a habitat. Interrelationships between humans and the environment. Geologic factors in urban and regional land use planning.

GEOL 1403 Physical Geology (3-3) Credit: 4

Introductory course in the nature and properties of the material which make up the earth. Topics included are processes of glaciation, volcanism, weathering, and erosion. Modern theories, such as plate tectonics, are also studied. Field work, including the study of local rocks and minerals, is an integral part of the course.

GEOL 1404 Historical Geology (3-3) Credit: 4

The course involves a study of the record of life forms that 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 earth 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) Credit: 4

This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

GERM 1412 Beginning German II (4-2) Credit: 4

Elementary grammar is completed. Pronunciation, drill, and conversation based on reading are continued. Common conversational phrases are stressed. Prerequisite: GERM 1411.

GERM 2311 Intermediate German I (3-0) Credit: 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, 1412, or two years of German in an accredited high school.

GERM 2312 Intermediate German II (3-0) Credit: 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) Credit: 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) Credit: 3

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 public policy.

GOVT 2304 Introduction to Political Science (3-0) Credit: 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.

(HIST) HISTORY

HIST 1301 History of the United States to 1877 (3-0) Credit: 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) Credit: 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) Credit: 3

A survey of Texas from the Spanish exploration to the present.

HIST 2311 Survey of Western Civilization I (3-0) Credit: 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) Credit: 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 2370 International Relations and U.S. Foreign Policy (3-0) Credit: 3

A study of international relationships and problems in world affairs; organization and processes used to arrive at foreign policy decisions of the United States; the elements of international communist ideologies; and the evolution of American foreign policy since 1945. (May not be repeated for GOVT 2304 credit.)

HIST 2381 African-American History (3-0) Credit: 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.

(HMMG) HOTEL/MOTEL MANAGEMENT

HMMG 1300 Food and Beverage Management § (3-0) Credit: 3

This is an introductory course in food and beverage operation, with an introduction to purchasing, receiving, storage, preparation and service.

HMMG 1302 Hotel/Motel Organization and Administration § (3-0) Credit: 3

This course includes management and organization of hotel industry, communications, accounting, personnel relations and administration, management of guests, and includes planning for today and tomorrow.

HMMG 1303 Front Office Procedures § (3-0) Credit: 3

This course includes hotel organization and services, front office salesmanship, cashiering, front office posting, accounting for guest charges, procedures and forms for accounting controls.

HMMG 1305 Energy Management § (3-0) Credit: 3

This course includes money-saving techniques using effective energy conservation methods. Energy management functions to be studied include energy problems facing the hospitality industry, an action plan for energy management, implementing an energy management program and energy management consisting of retrofit and design.

HMMG 1306 Convention Management and Service § (3-0) Credit: 3

This course defines the scope of various segments of the Convention Market, explains what is required to meet individual needs, and, most importantly, explores methods and techniques that lead to better service.

HMMG 1307 Tourism and the Hospitality Industry § (3-0) Credit: 3

Presents a comprehensive systems review of tourism, stressing the interrelationships and interdependencies of the various component elements. It explains, from a marketing point of view and through practical real-life examples and applications, how tourism works and how it can be utilized by various businesses.

HMMG 1308 Hotel/Motel Security Management § (3-0) Credit: 3

This course explains the issues surrounding the need for individualized security programs, examines a wide variety of security equipment and procedures, discusses guest protection and internal security for asset protection, and outlines OSHA regulations applicable to lodging properties.

HMMG 2301 Hospitality Industry Law § (3-0) Credit: 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.

HMMG 2302 Supervisory Housekeeping § (3-0) Credit: 3

This course covers organization of a hotel, including the housekeeping department, job schedules, job breakdown, floor care, stain removal, fire inspection, purchasing records, equipment records, linen inventory and care, carpeting and care, and basic interior design.

HMMG 2304 Financial Management § (3-0) Credit: 3

Methods and application of financial management within combined food service facilities. Primary emphasis upon sales accountability and internal controls utilized within bar, dining room, and hotel operational area. Secondary emphasis on budgeting and forecasting with applications of effective labor/sales ratios. Prerequisite: FSMG 1302 or MATH selection.

HMMG 2305 Hospitality Facilities Management and Design § (3-0) Credit: 3

The role, cost, and management of hospitality facilities; managing maintenance needs; facility systems such as water and waste water, electrical, HVAC, lighting, laundry, telecommunications, safety and security, waste management, food service equipment, and energy management; building and exterior facilities; parking areas; lodging and food service planning and design; and renovation.

HMMG 2306 Recreational Services § (3-0) Credit: 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.

HMMG 2307 Marketing of Hospitality Services § (3-0) Credit: 3

This course is designed to provide students with basic knowledge and practical experience enabling them to develop strategic marketing plans for hotel/motel properties.

HMMG 2308 Food and Beverage Controls § (3-0) Credit: 3

Covers the principles and procedures involved in an effective system of food, beverage, labor and sales income control. Emphasizes the development and use of standards and the calculation of actual costs.

HMMG 2309 Hospitality Industry Computer Systems § (3-0) Credit: 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.

§ Students must pass the National Certification examination to receive credit for this course.

(HUMA) HUMANITIES

HUMA 1315 Introduction to Fine Arts (3-0) Credit: 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 and performing arts, within the context of Fine and Applied Arts.

(INDU) INDUSTRIAL FUNDAMENTALS

INDU 1400 Industrial Fundamentals (3-3) Credit: 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) **Credit: 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) **Credit: 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) **Credit: 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) **Credit: 4**
This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.
- JAPN 1412 Beginning Japanese II** (4-2) **Credit: 4**
Elementary grammar is completed. Pronunciation, drill, and conversation based on reading are continued. Common conversational phrases are stressed. Prerequisite: JAPN 1411.
- JAPN 2311 Intermediate Japanese** (3-0) **Credit: 3**
Review and application of skills in listening, comprehension, and speaking; introduction to advanced grammar patterns; and acquisition of additional Japanese characters.

(LANG) FOREIGN LANGUAGE

SEE (FREN), (GERM), (JAPN), (SPAN), OR (TAGA)

(LAW) LAW ENFORCEMENT

- LAW 1201 Defensive Tactics** (1-2) **Credit: 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.
- LAW 1301 Introduction to Criminal Justice** (3-0) **Credit: 3**
History, development, and philosophy of law enforcement and criminal justice in a democratic society. Introduction and career orientation to the multifaceted agencies involved in the administration of criminal justice.
- LAW 1302 Criminal Investigation I** (3-0) **Credit: 3**
Investigative theory, collection and preservation of evidence, sources of information, interview and interrogation, uses of forensic sciences, and case and trial preparation.
- LAW 1303 Legal Aspects of Law Enforcement** (3-0) **Credit: 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.
- LAW 1304 The Courts and Criminal Procedures** (3-0) **Credit: 3**
The judiciary in the criminal justice system, structure of America Court System, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence and sentencing.
- LAW 1306 Correctional Systems and Practices** (3-0) **Credit: 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) Credit: 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) Credit: 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, criminal responsibility.
- LAWE 1309 Police Systems and Practices (3-0) Credit: 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) Credit: 3**
Modern methods and skills required for criminal investigation including discovery methods, development 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: LAWE 1302.
- LAWE 1312 Commissioned Security Officer Course (2.5-5) Credit: 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 by 72nd Texas Legislature.
- LAWE 1315 Street Survival (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 3**
This course will provide the student with some understanding of the evolution of criminal corrections and explore with the student the many avenues into which the corrections field branches. Develops in each student a basic understanding of the various methods of corrections so that they may function efficiently in the field.
- LAWE 2303 Criminal Justice Seminar (3-0) Credit: 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 in courses dealing with different problems and issues.
- LAWE 2304 Juvenile Procedures (3-0) Credit: 3**
The organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juveniles; case disposition; juvenile statutes; and court procedures.
- LAWE 2306 Traffic Planning and Administration (3-0) Credit: 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.

LAWE 2308 Patrol Administration (3-0) Credit: 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.

LAWE 2310 Correctional Control and Administration (3-0) Credit: 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.

LAWE 2312 Homicide Investigation (3-0) Credit: 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.

LAWE 2313 Illegal and Controlled Substances (3-0) Credit: 3

This course presents an in-depth approach to the medical and legal aspects on the topic 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.

LAWE 2314 Organized Crime (3-0) Credit: 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 the federal and state authorities are fighting it.

LAWE 2315 Interviewing and Interrogation Techniques (3-0) Credit: 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.

LAWE 2319 Anti-Terrorism (3-0) Credit: 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.

LAWE 2350 First Responder (3-0) Credit: 3

This course covers health knowledge regarding individual and group welfare. It is concerned with the principles and practices of first aid for the sick and injured for the non-medically-trained individual. Emphasis is given to the preventive aspects as well as care following an injury or illness.

(LEGA) LEGAL ASSISTANT

LEGA 1302 Legal Office Ethics and Management (3-0) Credit: 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, computerized legal research, management of personnel, proofreading, management of investigations 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, check list and files, and disbursement on behalf of clients.

LEGA 1304 Principles of Family Law (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 Act 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) Credit: 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) Credit: 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) Credit: 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 2301 Tort and Personal Injury (3-0) Credit: 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 2306.

LEGA 2302 Contract Law and the Uniform Commercial Code (3-0) Credit: 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) Credit: 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 2306 Techniques of Legal Research (3-3) Credit: 3

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 indexes, digests, Shepards, and treatises. Other sources of written research projects, the federal and state codes and reports and administrative regulations will also be covered. Prerequisite: LEGA 1401. Corequisite: LEGA 1307.

LEGA 2307 Juvenile Law (3-0) Credit: 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 2401 Techniques of Legal Practice (3-3) Credit: 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 2404 Legal Assistant Internship (1-20) Credit: 4

This course consists of on-the-job training in the legal field. It utilizes the principles, skills, and knowledge gained in the classroom. The student works at an approved work site under the supervision of a College coordinator. Prerequisite: Sophomore standing and consent of the Department Chair.

LEGA 2405 Wills, Trust, and Probate (3-3) Credit: 4

This course presents the basics of legal writing and legal documents with which a legal assistant will have to deal. The various kinds of legal writing will be considered. These are letters, instruments (e.g., contracts, deeds, wills, bonds, leases), pleading (e.g., complaint, answer) memoranda and briefs. Special attention will be given to the memoranda as documents which must be resolved before instruments, pleadings, or briefs are sent out. The forms and principles of law for wills and trusts are covered. The organization and jurisdiction of the Texas Probate Court are studied. The administration of estates under Texas Probate Law is analyzed and estate and inheritance taxes are reviewed. Prerequisites: LEGA 1307 and 1401.

(MATH) MATHEMATICS

MATH 0302 Fundamentals of Mathematics I (3-0) Credit: 3

This course includes operations with common fractions, decimals and positive integers, order of operations, prime factorizations, greatest common factors, least common multiples, percentages, and basic equations. Also included is an introduction to consumer and business applications, statistical graphing, and basic geometry.

MATH 0304 Fundamentals of Mathematics II (3-0) Credit: 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.

MATH 0306 Intermediate Developmental Algebra I (3-0) Credit: 3

This course presupposes that the student has successfully completed MATH 0304 or has equivalent knowledge. Topics include a review of factoring, rational expression, radical expressions, complex numbers, radical equations, quadratics and the study of the parabola.

MATH 0307 Intermediate Developmental Algebra II (3-0) Credit: 3

This course presupposes that the student has successfully completed MATH 0306. 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.

MATH 1171 Basic Concepts of Statistics (1.25-0) Credit: 1

Basic Concepts of Statistics is a one semester hour course designed to present introductory statistical methods. Emphasis is placed on the theory of probability and basic understanding of statistical language and mathematical symbols used. This course will introduce the student to collection and tabulation of data, sampling, averages, probability and distribution.

MATH 1314 College Algebra (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 3

A continuation of Finite Mathematics I. Introduction to statistics, graphing, vectors, matrices, and linear programming. Prerequisite: MATH 1324.

MATH 2313 Calculus I (Fall) (3-0) Credit: 3

A first course in differential calculus. Prerequisite: MATH 1348 or equivalent, or concurrent enrollment in MATH 1348.

MATH 2314	Calculus II (Spring)	(3-0)	Credit: 3
A first course in integral Calculus. Prerequisite: MATH 2313 or equivalent.			
MATH 2315	Calculus III (Summer)	(3-0)	Credit: 3
A further study of limits, functions, sequences, series, elementary differential equations, partial derivatives, multiple integrals, and surface integrals. Prerequisite: MATH 2314 or equivalent.			
MATH 2320	Differential Equations	(3-0)	Credit: 3
Fourier series, linear differential equations, Laplace transforms, and series solution, all with applications. Prerequisite: MATH 2315.			

(MGMT) MANAGEMENT

MGMT 1158	Training Manager's Workshop	(1.5-0)	Credit: 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)	Credit: 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)	Credit: 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)	Credit: 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)	Credit: 2
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 1301	Organization and Management	(3-0)	Credit: 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)	Credit: 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)	Credit: 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)	Credit: 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) Credit: 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) Credit: 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) Credit: 3**
Introduction to theory and practice of insurance, including life, fire, automobile, and personal and business risk.
- MGMT 1308 Small Business Management (3-0) Credit: 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) Credit: 3**
Income tax legislation; present income tax laws and regulations; treasury decisions, court decisions and departmental rulings; income tax problems and returns.
- MGMT 1381 Management of Performance-Oriented Training (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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)	Credit: 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)	Credit: 1
A course that deals with trends, issues, advancements and literature in the management field.		
MGMT 2103 Time Management	(1-0)	Credit: 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)	Credit: 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)	Credit: 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)	Credit: 1
MGMT 2151 Platoon Trainer's Workshop	(1.5-0)	Credit: 1
MGMT 2152 Training Supervisor's Workshop	(1.5-0)	Credit: 1
MGMT 2161 Unit and Organizational Supply	(2.5-0)	Credit: 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)	Credit: 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)	Credit: 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)	Credit: 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)	Credit: 1
This course will provide communications skills and counseling and stress management techniques to enhance the student's ability to manage personnel effectively.		
MGMT 2174 Supervisory Management	(1-0)	Credit: 1
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.		

MGMT	2255	Platoon Trainer's Workshop	(2-0)	Credit: 2
MGMT	2256	Training Supervisor's Workshop	(2-0)	Credit: 2
Provides training management for the medium-sized organization (battalion) including long- and short-range plans, LRC, and ARTEP standards.				
MGMT	2257	Trainer's Workshop (TW)	(2.3-0)	Credit: 2
MGMT	2258	Training Manager's Workshop	(2-0)	Credit: 2
Provides training management information for battalion-sized units including long- and short-range goals, training assets, money and allocations, and ARTEP standards.				
MGMT	2259	Platoon Trainer's Workshop	(2.3-0)	Credit: 2
Provides management of training instruction at the platoon level including long- and short-range planning and ARTEP-integrated training for small groups.				
MGMT	2261	Leadership and Communications Seminar	(2-0)	Credit: 2
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.				
MGMT	2300	Credit and Collections	(3-1)	Credit: 3
This course covers the elements of mercantile and consumer credit organization of a credit department, sources of credit information, collection tools and procedures.				
MGMT	2301	Marketing Principles	(3-0)	Credit: 3
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.				
MGMT	2302	Human Resource Management	(3-0)	Credit: 3
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.				
MGMT	2303	Law and Legal Assistance	(3-0)	Credit: 3
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.				
MGMT	2304	Labor-Management Relations	(3-0)	Credit: 3
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.				
MGMT	2305	Business Law I	(3-0)	Credit: 3
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.				
MGMT	2306	Business Law II	(3-0)	Credit: 3
Additional studies in law of business, dealing with bailments, carriers, mortgages, suretyships, negotiable instruments, banks and banking, wills and estates, sales, bankruptcy. There is no prerequisite for this course.				

- MGMT 2307 Life Insurance (3-0) Credit: 3**
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.
- MGMT 2309 Supervision (3-0) Credit: 3**
A course designed to provide an understanding of planning work leadership, decision making, work problem solving, human behavior, and personnel relations.
- MGMT 2310 Personnel Counseling (3-0) Credit: 3**
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).
- MGMT 2312 Fundamentals of Systems Management (3-0) Credit: 3**
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.
- MGMT 2314 Ethics in Management (3-0) Credit: 3**
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.
- MGMT 2315 Public Relations (3-0) Credit: 3**
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.
- MGMT 2316 Management Applications I (1-5) Credit: 3**
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.
- MGMT 2317 Management Applications II (1-5) Credit: 3**
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) Credit: 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 2320 Business Operations (3-0) Credit: 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.

MGMT 2321 Business Plan Development (3-0) Credit: 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 and promotional plan, and the development of a business financial plan. Students will prepare a business prospectus describing a business that they want to develop or expand.

MGMT 2322 Salesmanship (3-0) Credit: 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) Credit: 3

Presents advanced leadership and management techniques, organizational goals, problem solving, communications and management of changes.

MGMT 2354 Management Problems (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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, & Objectives (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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, & Devices (2-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 & Staff Functions (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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, & Objectives (2-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 3,3**
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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 (2-1) Credit: 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) Credit: 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 & Programming (3-3) Credit: 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) Credit: 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) Credit: 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 & Architecture (3-3) Credit: 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: MISC 1403 or 1451 and 1405.
- MISC 1420 Word Processing for Microcomputers (3-3) Credit: 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) Credit: 4**
An entry-level course designed to teach and 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) Credit: 4**
An entry-level course designed to teach the use of a current state-of-the-art data base in a hands-on environment to include installation of data base software.
- MISC 1450 Microcomputers for Business (3-3) Credit: 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) Credit: 4**
Introductory programming course for Microcomputer Technology Major. Problem solving, algorithm development, pseudo code and flow charting. An in-depth look at a high-level language through programming assignments.
- MISC 1454 PASCAL Programming (3-3) Credit: 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) Credit: 4**
Designed to provide the student with a working knowledge of desk top publishing. Taught in a hands-on environment. Prerequisite: MISC 1420 or 1450.
- MISC 1461 Operating Systems (3-3) Credit: 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) Credit: 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) Credit: 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) Credit: 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 up-grade 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) Credit: 3

A study of recent developments and topics of current interest in computer science.

MISC 2401 Advanced COBOL (3-3) Credit: 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 ANS 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) Credit: 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 Advanced BASIC Programming (3-3) Credit: 4

An in-depth study of advanced techniques for writing efficient, well-designed commercial applications. Interactive and conversational programming techniques, to include data editing, menus, string manipulation. File handling will be emphasized. Prerequisite: MISC 1451 and one other programming language.

MISC 2454 Data Communications & Networking (3-3) Credit: 4

A study of data communications and networking of microcomputer systems. Topics include communications hardware/software and Local Area Networks (LAN). Prerequisite: MISC 1461.

MISC 2455 Microcomputer Field Projects (1-9) Credit: 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) Credit: 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 2404 or MISC 1454.

MISC 2457 Programming with ADA* (3-3) Credit: 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) Credit: 4

This course builds upon the skill attained in MISC 2456, C Language Programming I. Major topics include an analysis of searching and sorting algorithms pertaining to structures such as linked-lists; sparse memory management; and binary trees. Software engineering concepts and project management techniques are covered. Numerous programming exercises and projects are used to reinforce concepts. Prerequisite: MISC 2456.

MISC 2460 Multimedia Applications (3-3) Credit: 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 1460.

(MTNT) MAINTENANCE TECHNOLOGY

MTNT 1214 Fundamentals of Concrete and Masonry I (2-2) Credit: 2

This course is an introduction to the use of concrete in the building trades industry. The student will learn safety procedures, proper use of tools and equipment, materials types and uses, basic blue print reading, materials estimating, and state and federal guidelines regulating the trade. Concrete construction techniques, setting of forms and reinforcement, various concrete mixes, and finishing techniques will also be covered.

MTNT 1215 Fundamentals of Concrete and Masonry II (2-2) Credit: 2

This course is a continuation of MTNT 1214. The student will learn the basic theories of masonry applications, choose materials, properly use tools and equipment, prepare and use mortar and do basic brick construction designs, complete simple walls and corners, and care for and repair brick masonry. Prerequisite: MTNT 1214.

MTNT 1401 Carpentry I (3-3) Credit: 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) Credit: 4

This course is designed to provide the student with a working knowledge of the electrical installation, service and repair procedures for residential and light commercial buildings. Prerequisite or Corequisite: INDU 1400.

MTNT 1411 Basic Masonry I (3-6) Credit: 4

This course is an introduction to the highly skilled craft of masonry and 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 (3-5) Credit: 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 (3-6) Credit: 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) Credit: 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: MTNT 1401.

MTNT 2403 Plumbing I (3-3) Credit: 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) Credit: 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, preparation of surfaces, refinishing damaged and proper maintenance of finished surfaces. Prerequisite or Corequisite: INDU 1400.

MTNT 2405 Foundations, Framing, and Roofing (3-3) Credit: 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 exercise 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) Credit: 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 joist, roof rafter and sheathing material requirements. Prerequisite: MTNT 1401.

- MTNT 2407 Interior-Exterior Finishing (3-3) Credit: 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, finishing floors, stair finish, shelving and interior trim. The student will also learn the importance of truing areas where cabinets will be installed. Prerequisite or Corequisite: MTNT 2405.
- MTNT 2408 Mill Cabinetry Construction and Installation (3-3) Credit: 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) Credit: 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) Credit: 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 (3-5) Credit: 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, fire places, arches, and lintels will be covered. Prerequisite: MTNT 1413 or consent of the Department Chair.
- MTNT 2415 Advanced Masonry I and Blueprint Reading (3-6) Credit: 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 (3-6) Credit: 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.
- MTNT 2419 Maintenance Technology Internship (1-20) Credit: 4**
This course consists of on-the-job maintenance technology training that utilizes the principles, knowledge, and skills gained in the classroom and laboratory. The student is employed at an approved work site under the supervision of a College instructor/coordinator. Prerequisite: Satisfactory completion of all other INDU, AIRC, MTNT, and WELD, or all TIBT prefix courses, or consent of the Department Chair.

(MUSI) MUSIC

- MUSI 1141 Choir (1-2) Credit: 1**
This course is recommended to all music students, but it is open to all college students. Preparation for on-campus and public performances.
- MUSI 1181 Class Piano I (1-1) Credit: 1**
Introduction to the keyboard, easy selections from the classic and contemporary piano literature. Scales on two octaves through two key signature. Memory work is emphasized throughout. One hour daily practice required. Prerequisite: Credit or enrollment in MUSI 1301 or 1302.

- MUSI 1182 Class Piano II** (1-1) Credit: 1
A continuation of Class Piano I. Scales, chords and arpeggios on two octaves through two key signatures. Literature: selections from the easy romantic and contemporary piano literature. Memory work is emphasized throughout. One hour daily practice required. Prerequisite: MUSI 1181 or consent of the Department Chair; credit or enrollment in MUSI 1301 or 1302.
- MUSI 1183, 1184 Class Voice I & II** (1-1) Credit: 1,1
These courses are concerned with the most basic principles of singing; correct breathing, posture and the proper use of the vocal anatomy; i.e., palate, larynx, and tongue. Basic vocal literature will be introduced. Prerequisite: Credit or enrollment in MUSI 1301.
- MUSI 1216 Ear Training I** (1-2) Credit: 2
This course is designed to help the student develop the aural skills pertinent to proficiency in music theory. It includes the study and proper identification of melodic patterns, intervals and triads, and exercises in melodic dictation. Prerequisite: Credit or enrollment in MUSI 1301.
- MUSI 1217 Ear Training II** (1-2) Credit: 2
A continuation of Ear Training I. Sight singing, intervals, triads, and seventh chords, asymmetric and mixed meters. Exercises in melodic and harmonic dictation. Prerequisite: MUSI 1216 and credit or enrollment in MUSI 1302.
- MUSI 1269, 1270 Private Piano I & II** (0-2) Credit: 2, 2
For students with a considerable keyboard skill. Scales, chords and arpeggios on four octaves in all keys. Literature: selections from the romantic, impressionistic and modern piano literature. All work is to be memorized. One hour Private lesson per week. Two hours daily practice required. Prerequisite: MUSI 2182 or audition, credit or enrollment in MUSI 1302, 2311, or 2312.
- MUSI 1281, 1282 Private Voice I & II** (0-2) Credit: 2, 2
A continuation of the principles of Class Voice I and Class Voice II, with greater depth and concentration. Students learn to improve breath control, diction, and tone quality. The literature includes songs in English and Italian, and for more advanced students, German and French. Prerequisite: MUSI 1184 and/or audition; credit or enrollment in MUSI 1301 or 1302.
- MUSI 1301 Music Fundamentals** (2-1) Credit: 3
An introduction to music through the audiovisual relative solemnization method. Study of the pentatonic, modal and diatonic scales, key signatures, intervals, triads, cadences; introduction to four-part writing. Limited ear training and sight singing exercises and melodic dictation. Cadences on the keyboard.
- MUSI 1302 Music Theory** (2-1) Credit: 3
A continuation of Music Fundamentals with an introduction to the harmonic materials of the 18th and 19th centuries. Harmonic progressions with root and inverted triads, the dominant seventh chord, secondary dominants, the sequence. Analysis of short works. Cadences and sequences on the keyboard. Prerequisite: MUSI 1301 or consent of the Department Chair.
- MUSI 1306 Music Appreciation** (3-0) Credit: 3
This course is designed for the music student as well as for the general college student. It emphasizes intelligent, directed listening to music with attention focused on the materials, the forms and the periods and styles of music. Course work will also cover the relation of music to other areas of cultural development.
- MUSI 1308 Music Literature I** (3-1) Credit: 3
A survey of the development of music from the Ancient World to the present time, with an in-depth study of the music from the 15th through the 19th century. Emphasis will be placed on principal forms, periods and composers and the literature of each of the historical periods.
- MUSI 1309 Music Literature II** (3-1) Credit: 3
A continuation of Music Literature I with an in-depth study of music in the periods of the late 19th and 20th centuries; the concurrent symphonic and concert literature of today; voice, choral, and instrumental organizations.

- MUSI 2181 Class Piano III** (1-1) Credit: 1
Scales, chords and arpeggios on two octaves through three key signatures. Literature: Short Preludes by Bach, a classic sonatina, selection from the romantic and contemporary piano literature. All work is to be memorized. One hour daily practice required. Prerequisite: MUSI 1182 or consent of the Department Chair; credit or enrollment in MUSI 1301, 1302, or 2311.
- MUSI 2182 Class Piano IV** (1-1) Credit: 1
A continuation of Class Piano III. Scales, chords and arpeggios on two octaves through four key signatures. Literature: Short Preludes by Bach, a classic Sonatina, selection from the romantic and contemporary piano literature. All work is to be memorized. One hour minimum daily practice required. This course is a preparation for private piano and may be repeated until the student is ready to meet the entrance requirements for MUSI 1269. Prerequisite: MUSI 2181 or consent of the Department Chair; credit or enrollment in MUSI 1302, 2311, or 2312.
- MUSI 2271, 2272 Private Piano III & IV** (0-2) Credit: 2, 2
Scales, chords and arpeggios on four octaves in all keys. Literature: WTC Preludes and Fugues by Bach, a classic Sonata or a standard Concerto, selections from the romantic, impressionistic and modern piano literature. All work is to be memorized. One one-hour private lesson per week. Two hours daily practice required. Prerequisite: MUSI 1270 and credit or enrollment in MUSI 2311 or 2312.
- MUSI 2283, 2284 Private Voice III & IV** (0-2) Credit: 2,2
A continuation of MUSI 1281 and 1282. More difficult songs from the classic and romantic literature, oratorio and operatic arias, modern French songs, 20th century American songs. One one-hour private lesson per week. Prerequisite: MUSI 1282 and credit or enrollment in MUSI 2311 or 2312.
- MUSI 2301, 2302 Advanced Private Piano I & II** (0-2) Credit: 3,3
Scales, chords and arpeggios on four octaves in all keys. Literature: Partitas, Suites or Preludes and Fugues by Bach, a Beethoven Sonata or a standard Concerto, romantic, impressionistic and modern selections. All work is to be memorized. One one-hour private lesson per week. Three hours daily practice required. Prerequisite: MUSI 2272 or audition, credit or enrollment in MUSI 2311 or 2312.
- MUSI 2303 Piano Pedagogy** (2-1) Credit: 3
Open to music majors only. The study of piano teaching methods from the beginning through the intermediate grades. The development of technique, memory, style, and musicianship. The planning of a balanced repertoire, review and evaluation of piano literature. Laboratory includes supervised practice teaching. Prerequisite: Credit or enrollment in MUSI 1302 and 2272 or consent of the Department Chair.
- MUSI 2311 Intermediate Harmony** (3-2) Credit: 3
A study of the harmonic materials of the 18th and 19th centuries through analysis and written exercises. Dominant and secondary seventh chords, secondary dominants, the diminished seventh chord, the Neapolitan sixth, the augmented sixth chords, nonharmonic tones, harmonic dictation for the keyboard. Prerequisite: MUSI 1302.
- MUSI 2312 Advanced Harmony** (3-2) Credit: 3
The study of harmony as an organizing element of the large-scale musical structure. Diatonic, chromatic and enharmonic modulations; the modulating sequence. Melody harmonization, analysis of larger works, harmonic dictation. Modulation to related and distant keys on the keyboard. Prerequisite: MUSI 2311.
- MUSI 2369, 2370 Advanced Private Piano I & II** (0-2) Credit: 3,3
Scales, chords, and arpeggios on four octaves in all keys. Literature: Partitas, Suites, or Preludes and Fugues by Bach, a Beethoven Sonata or a standard Concerto, romantic, impressionistic and modern selections. All work is to be memorized. One hour private lesson per week. Three hours daily practice required. Prerequisite: MUSI 2272 or audition, credit or enrollment in MUSI 2311 or 2312.

(OADM) OFFICE ADMINISTRATION

- OADM 1131 Beginning Typing I** (1.5-1.5) **Credit: 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) **Credit: 1**
A continuation of Beginning Typing I and Beginning Typewriting. Students will increase typing accuracy and speed. Prerequisite: OADM 1232 or 1303 or ability to type 25 WPM for five minutes with no more than five errors.
- OADM 1232 Beginning Typing II** (1.5-1.5) **Credit: 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) **Credit: 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** (3-3) **Credit: 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** (3-3) **Credit: 3**
Students will continue shorthand training and reinforcement of theory. Prerequisite: OADM 1301 or equivalent.
- OADM 1303 Beginning Typewriting** (3-3) **Credit: 3**
A beginning course in touch typewriting for the mastery of machine parts and the keyboard. Special emphasis on speed development, including an introduction to letter writing, tabulating and preparing manuscripts.
- OADM 1304 Intermediate Typewriting** (3-3) **Credit: 3**
A continuation of OADM 1303. Additional skills in terms of accuracy and speed will be evidenced by students. Composition and typing of business letters, tabulations, and manuscripts of a more demanding content will be instructed.
- OADM 1305 Information and Records Management** (3-3) **Credit: 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 data base 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) **Credit: 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) **Credit: 3**
A course designed to teach effective business writing and to give practice in composing all types of business letters and reports.
- OADM 1309 Business Mathematics & Calculating Machines** (3-3) **Credit: 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 1401 Administrative Secretarial Cooperative Training I** (1-20) **Credit: 4**
This course consists of on-the-job administrative secretarial training that utilizes the principles, skills, and knowledge gained in the setting of the classroom. The student is employed at an approved work site under the supervision of the Department Chair.

OADM 2301 Advanced Shorthand**(3-3) Credit: 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) Credit: 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: OADM 1303 and 1304.

OADM 2304 Office Accounting I**(3-3) Credit: 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**(3-3) Credit: 3**

Analysis and recording of business transactions, use of the journal and ledgers, trial balance and work sheets, 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) Credit: 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 2308 Office Occupations Internship**(1-5) Credit: 3**

The student will be provided a combination of occupationally related classroom instruction and on-the-job training in cooperation with offices within the Office Administration Department and other campus offices. Actual work training will be available in the following areas: keyboarding, filing, duplication, use of telephone, preparation of correspondence, voice transcription machine, recordkeeping, proofreading, etc.

OADM 2309 Office Administration Internship**(1-5) Credit: 3**

Students will be provided a combination of occupational related class work instruction and on-the-job training in cooperation with Office Administration Department and other campus offices. Students will demonstrate advanced competencies with work experiences in the following areas: taking dictation, keyboarding, letter composing, telephone procedures, filing, work scheduling, financial calculating, duplicating, transcribing from dictation equipment, etc.

OADM 2350 Machine Shorthand**(3-3) Credit: 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.

OADM 2401 Administrative Secretarial Cooperative Training II**(1-20) Credit: 4**

This course is a continuation of the Administrative Secretarial Cooperative Training I. Prerequisite: OADM 1401.

(OPRT) OFFSET PRINTING

OPRT 1401 Introduction to Offset Printing**(3-3) Credit: 4**

This course offers the student an introduction of offset printing with a general survey of various printing processes and their uses in industry. The history of printing, the techniques involved in the production and distribution of printing materials, the kinds of printing industries, and printing terminology are included. It provides an introduction to all equipment and how each piece of equipment related to the total plant operation. The student will be introduced to Desk Top Publishing.

OPRT	1402	Camera, Stripping and Platemaking	(3-3)	Credit: 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: OPRT 1401 or consent of the Department Chair.				
OPRT	1403	Offset Press Operation I	(3-3)	Credit: 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: OPRT 1401 or consent of the Department Chair.				
OPRT	1404	Bindery Operations	(3-3)	Credit: 4
Theory and operation of the paper cutter, paper drill, stitcher, collator and paper folder and basic binding techniques. The course includes actual print shop production-type activities utilizing the equipment. The course also contains a study of the basic characteristics of paper and ink, and the processes involved in the manufacture. Procedures for estimating the expenses of and determining the amount of customer charges for printing jobs are also taught. Prerequisite or Corequisite: OPRT 1401 or consent of the Department Chair.				
OPRT	1405	Desk Top Publishing	(3-3)	Credit: 4
This course covers basic Desk Top Publishing principles and practices. The student will learn the operation of equipment for type setting, designing, and formatting jobs for layout. Prerequisite: OPRT 1401 or 1402 or consent of the Department Chair.				
OPRT	1408	Offset Printing Equipment Maintenance	(3-3)	Credit: 4
A thorough study of the adjustments, preventive maintenance and simple repair on darkroom, composing room, press room, and bindery equipment. Prerequisite: OPRT 1401 or 1403 or consent of the Department Chair.				
OPRT	2401	Advanced Camera, Stripping and Platemaking	(3-3)	Credit: 4
Advanced theory and techniques of line copy reproduction, with emphasis on halftone reproductions, including duotone color and multicolor stripping and plate processing of line copy. Prerequisite: OPRT 1402 or consent of the Department Chair.				
OPRT	2402	Offset Press Operation II	(3-3)	Credit: 4
Advanced offset press operation including printing of large solids, duotone and multi-color line copy. Students will train on more advanced equipment and improve the skills acquired in the previous offset press operation course. Prerequisite: OPRT 1403 or consent of the Department Chair.				

(PHED) PHYSICAL EDUCATION

PHED	1100	Football & Basketball	(1-2)	Credit: 1
PHED	1101	Volleyball & Softball	(1-2)	Credit: 1
PHED	1102	Beginning Badminton	(1-2)	Credit: 1
PHED	1103	Beginning Bowling	(1-2)	Credit: 1
PHED	1104	Soccer	(1-2)	Credit: 1
PHED	1105	Folk & Square Dancing	(1-2)	Credit: 1
PHED	1106	Beginning Swimming	(1-2)	Credit: 1
PHED	1107	Beginning Tennis	(1-2)	Credit: 1
PHED	1108	Beginning Golf	(1-2)	Credit: 1
PHED	1109	Basketball & Soccer	(1-2)	Credit: 1
PHED	1110	Karate I	(1-2)	Credit: 1
PHED	1111	Rolling Skating	(1-2)	Credit: 1

PHED	1112	Angling	(1-2)	Credit: 1
PHED	1113	Country Western Dance	(1-2)	Credit: 1
PHED	1114	Volleyball	(1-2)	Credit: 1
PHED	1115	Basketball	(1-2)	Credit: 1
PHED	1117	Hunting	(1-2)	Credit: 1
PHED	1118	Jogging	(1-2)	Credit: 1
PHED	1119	Racquetball	(1-2)	Credit: 1
PHED	1120	Body Building	(1-2)	Credit: 1
PHED	1123	Advanced Bowling	(1-2)	Credit: 1
PHED	1124	Advanced Swimming	(1-2)	Credit: 1
PHED	1125	Intermediate Tennis	(1-2)	Credit: 1
PHED	1126	Advanced Golf	(1-2)	Credit: 1
PHED	1127	Tumbling	(1-2)	Credit: 1
PHED	1128	Figure Development	(1-2)	Credit: 1
PHED	1129	Advanced Badminton	(1-2)	Credit: 1
PHED	1130	Physical Conditioning	(1-2)	Credit: 1
PHED	1131	Aerobics	(1-2)	Credit: 1
PHED	1132	Varsity Athletics	(1-2)	Credit: 1
PHED	1133	Weight Training	(1-2)	Credit: 1
PHED	1134	Cycling	(1-2)	Credit: 1
PHED	1135	Archery	(1-2)	Credit: 1
PHED	1136	Figure Control	(1-2)	Credit: 1
PHED	1138	Rhythmic Aerobics	(1-2)	Credit: 1
PHED	1140	Karate II	(1-2)	Credit: 1
PHED	1151	Scuba Diving	(1-2)	Credit: 1

Instruction and participation in scuba diving. Prerequisite: Demonstrated swimming skills.

PHED 1301 Foundations of Physical Education (3-0) Credit: 3

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.

PHED 1304 Foundations of Health (3-0) Credit: 3

A fundamental course in principles and problems of healthy living. Emphasis on current information and thought to be applied to individual daily lives.

PHED 1306 Safety & First Aid (3-0) Credit: 3

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.

PHED 1308 Sports Officiating (3-0) Credit: 3

Theory and practice in techniques of officiating. Officiating experience.

PHED 1336 Principles of Recreational Leadership (3-0) Credit: 3

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.

PHED 2155 Water Safety (1-2) Credit: 1

Participation and instruction in advanced aquatic activities. Prerequisite: Demonstrated swimming skills.

(PHIL) PHILOSOPHY

PHIL 1301 Introduction to Philosophy (3-0) Credit: 3

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.

PHIL 1304 World Religions (3-0) Credit: 3

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.

PHIL 2303 Logic (3-0) Credit: 3

Nature and methods of correct reasoning, deductive proof, inductive proof, fallacies, and arguments.

PHIL 2306 Introduction to Ethics (3-0) Credit: 3

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.

PHIL 2307 Introduction to Social and Political Philosophy (3-0) Credit: 3

Critical examination of the major theories concerning the organization of societies and government.

PHIL 2374 History and Philosophy of Judaism (3-0) Credit: 3

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.

PHIL 2375 History and Philosophy of the Early Christian Period (3-0) Credit: 3

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.

(PHOT) PHOTOGRAPHY

PHOT 1401 Introduction to Photography (3-2) Credit: 4

This course emphasizes the handling of small cameras, film exposure, processing, contact printing, and basic enlarging. Flash and existing light photography is studied with new features, action photography, and storytelling photographs. Printing and composing photographs for publication are also included.

PHOT 1402 Portrait Photography (3-2) Credit: 4

A study is made of fundamental lighting, camera techniques, posing, composition, processing, and printing as applied to portraiture. Experience is provided in retouching negatives and prints, mounting, and making storytelling pictures for fashion and advertising. Prerequisite: ARTS 2356.

PHOT 1403 Advanced Photography (3-2) Credit: 4

The course includes elements of composition and film exposure development for specific gamma studies. Sensitometry, advanced photographic printing, characteristics of printing papers, processing for contrast, print balance, and toning are included. Principles of filters and lenses and advanced focusing techniques are studied. Prerequisite: PHOT 1401 or consent of instructor.

PHOT 1404 Commercial Photography (3-2) Credit: 4

A study is made of fundamental differences between commercial and advertising photography. Although both are studied, emphasis will be on the commercial level such as products, houses, factories, weddings, and port photography. Emphasis on what a commercial photographer does, how business is set up, what equipment is needed, how clients are found, what prices are charged, and new trends in the field are reviewed. Prerequisites: ARTS 2356 and 2357.

PHOT 1405 Advanced Print Making (3-2) Credit: 4

This course includes special instruction and laboratory work in advanced print making, mounting, display, toning and tinting, and special procedures in graphic techniques in print making with higher contrast materials. Preparation of a black and white portfolio is included. Prerequisites: ARTS 2356 and 2357.

PHOT 2403 Portrait Retouching (3-2) Credit: 4

Portrait negatives retouched by the use of leads, dyes, and etching with special attention to the study of facial structure and demonstrations in printing and retouching negatives. Some color techniques included. Prerequisite: PHOT 1402.

PHOT 2404 Photographic Production (1-8) Credit: 4

The student prepares a portfolio of photographs for the mass media, business, education, government, industry, and science for presentation to staff members and to prospective employers. Individualized projects. Prerequisites: ARTS 2356; PHOT 1402, 1404, and 2406.

PHOT 2406 Color Photography I (3-2) Credit: 4

Study of primary and secondary colors of light, color temperature, color compensations in film exposure, the making of color slides for visual education, theory of color negative systems, and demonstrations of Type-C printing. Prerequisite: ARTS 2356.

PHOT 2407 Color Photography II (3-2) Credit: 4

Positive and negative color film processing, sensitometry, and color printing. Prerequisite: PHOT 2406.

(PHYS) PHYSICAL SCIENCES

PHYS 1305 Survey of Physics (3-0) Credit: 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) Credit: 3

A non-mathematical approach to the solar system. Beginnings of astronomy, motions of celestial bodies, minor members of the solar system, atoms and light are studied. Planetarium and observatory are used in class.

PHYS 1312 Descriptive Astronomy (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 4**

Mechanics and heat 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: MATH 2313 or concurrent enrollment.

PHYS 2426 Modern Physics II**(3-3) Credit: 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) Credit: 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) Credit: 3**

The study of the physiological, sociological, and psychological aspects of human sexuality. Prerequisite: PSYC 2301, 2315, or consent of the Department Chair.

PSYC 2308 Child Growth and Development**(3-0) Credit: 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) Credit: 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) Credit: 3**

A study of psychological concepts and principles related to healthy personality and social adjustments.

PSYC 2316 Psychology of Personality**(3-0) Credit: 3**

The study of various approaches to determinants, development, and assessment of personality. Prerequisite: PSYC 2301.

PSYC 2319 Social Psychology**(3-0) Credit: 3**

The study of individual behavior within the social environment.

(REAE) REAL ESTATE

REAE 1300 Real Estate Mathematics

(3-0) Credit: 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 Fundamentals

(3-0) Credit: 3

This course includes an overview of licensing requirements for a real estate broker and salesman, ethics of practice, titles to and conveyancing of real estate, legal descriptions, law of agency, deeds, encumbrances and liens, distinctions between personal and real property, contracts, appraisal, finance and regulations, closing procedures, and real estate mathematics.

REAE 1302 Real Estate Marketing

(3-0) Credit: 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) Credit: 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 license. 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) Credit: 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 Texas Real Estate Law: Earnest Money Contracts

(3-0) Credit: 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 licenses. Contents include the required excerpts from Section 7A(3) of the Texas Real Estate License Act of 1975, as amended, including: legal concepts of real estate, land description, real property rights and estates in land, contracts, conveyances, encumbrances, foreclosures, recording procedures, and evidence of titles. In addition, there is thorough coverage of the Broker-Lawyer Committee Statement of Principles and detailed instruction in actual preparation of all promulgated contract forms, with emphasis on those forms most commonly used.

REAE 2301 Real Estate Brokerage

(3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 3

This course consists of legal concepts of real estate; land descriptions 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; conveyancing; acknowledgments; constructive notice; mortgages; closings, landlord and tenant relationships; regulation of real estate; and real estate taxation.

REAE 2306 Real Estate Seminar (3-0) Credit: 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) Credit: 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 expense; rates in capitalization; straight and annuity capitalization; and reconciliation of value indications. Prerequisites: REAE 1301, 2302 or consent of the Department Chair.

REAE 2308 Real Estate Investments (3-0) Credit: 3

This course includes an analysis of real estate investment, characteristics, techniques of investment analysis, time-value of money, discounted and nondiscounted 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, 1301, and 2304; or approval of the Department Chair.

REAE 2309 Advanced Real Estate Finance (3-0) Credit: 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 1300 and 2304, or equivalent.

REAE 2310 Real Estate Law: Contracts II (3-0) Credit: 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.

(SGER) SMALL GAS ENGINE REPAIR

SGER 1401 Gas Engine Fundamentals (3-3) Credit: 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) Credit: 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 & Management (3-0) Credit: 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 lay-out, 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 & Repair (3-3) Credit: 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 & Repair (3-3) Credit: 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 & Garden Equipment Service (2-4) Credit: 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, WELD 1401. Corequisite: WELD 1402.

SGER 2412 Motion Drive Systems (3-3) Credit: 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) Credit: 4

This course is designed to provide the student with and 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 1407 or consent of the Department Chair.

(SMMG) SUPERMARKET MANAGEMENT

SMMG 1301 Warehousing and Transportation (3-0) Credit: 3

A study of the purposes, daily activities and overall operations of the various departments in a food distribution center. The course will acquaint individual store officials with the total process of distributing food products through the wholesale and retail channels.

SMMG 1302 Store Security (3-0) Credit: 3

This course covers shoplifting, bad check detection and the forger, the check-handling system, robbery and burglary prevention, and riot control.

SMMG 2301 Inventory Procedures and Control (3-0) Credit: 3

Designed for those in supermarket management or related fields concerned with inventory control. Emphasis is upon order quantity formulas and systems, inventory classification, inventory policy development, and inventory simulations. Prerequisite: A mathematics selection or consent of the Department Chair.

SMMG 2305 Merchandising Non-Perishables (3-0) Credit: 3

This course presents store layout, shelf allocation, inventory control, pricing, and in-store display of all non-perishable commodities. It examines effective principles and practices of the merchandising functions.

SMMG 2306 Merchandising Perishables (3-0) Credit: 3

This course extends the appreciation of merchandising principles and practices to the wide spectrum of offerings. Emphasis is upon operations of the meat department, produce, frozen foods, and dairy products.

(SOCI) SOCIOLOGY

SOCI 1301 Introduction to Sociology (3-0) Credit: 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) Credit: 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) Credit: 3

A study of problems in courtship, marriage, and family living as they relate to the social structure of American society.

SOCI 2336 Criminology (3-0) Credit: 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 1411 Beginning Spanish I (4-2) Credit: 4

The study of Spanish grammar and development of vocabulary. Stresses conversation in Spanish.

SPAN 1412 Beginning Spanish II (4-2) Credit: 4

A continuation of Beginning Spanish I, with continued emphasis on conversation. Prerequisite: SPAN 1411.

SPAN 2311 Intermediate Spanish I (3-0) Credit: 3

Continued emphasis on conversation, correct pronunciation, and correct writing. Reading from various Spanish-American authors. Prerequisites: SPAN 1411, 1412, or 2 years of Spanish at an accredited high school.

SPAN 2312 Intermediate Spanish II (3-0) Credit: 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) Credit: 3

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) Credit: 3

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) Credit: 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) Credit: 3

Theory, examples, and participation in exercises to improve effective one-to-one and small group communication.

SPCH 1321 Business & Professional Speaking (3-0) Credit: 3

Theories and skills of speech communication as applied to business and professional situations. Includes participating in an interview, the preparation of a resume and cover letter, engaging in problem-solving discussions, and delivering speeches in public.

SPCH 2144 Forensic Activities III (1-0) Credit: 3

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) Credit: 3

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) Credit: 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) Credit: 4

This course covers the fundamentals 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 & Performance for Radio & Television (3-3) Credit: 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 (3-3) Credit: 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.

TELE 1407 Advanced Audio Production (3-3) Credit: 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) Credit: 4

This course offers advanced training in television production. Included will be experience as a cameraperson, 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 for Telecommunications Majors I & II (3-3) Credit: 3

Advertising and Promotions for Telecommunication majors 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 (1-8) Credit: 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, set-up, 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 1403.

TELE 2407 Advanced Field Production (3-3) Credit: 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 (1-8) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 and Practice (3-0) Credit: 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) Credit: 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) Credit: 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) Credit: 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) Credit: 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 2305 Railroad Transportation I (3-0) Credit: 3**
 This is the beginning study of rail rates, including instruction in the use of freight classification and state rail tariffs. It also includes instruction in applicable state and federal regulation of rail rates.
- TRAN 2306 Railroad Transportation II (3-0) Credit: 3**
 A study of transcontinental rail freight rates, construction of combination through rates, routings, use of guides and maps, rail accessorial services including switching reconsignment, stop-off, transit and demurrage, and rate adjustment procedures. Prerequisite: TRAN 2305.
- TRAN 2307 Highway Transportation I (3-0) Credit: 3**
 This is the beginning study of motor carrier rates and practices including instruction in diversified rate problems including both interstate and intrastate tariffs. Prerequisite: TRAN 2306.
- TRAN 2308 Highway Transportation II (3-0) Credit: 3**
 This is an advanced study of motor carrier rates and practices including instruction in diversified rate problems including both interstate and intrastate tariffs. Prerequisite: TRAN 2307.
- TRAN 2309 Airline Freight Transportation I (3-0) Credit: 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) Credit: 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) Credit: 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.

(WELD) WELDING

WELD 1250 Basic Oxy Welding (2-2.3) Credit: 2

Instruction in selected types of WELD joints and edge preparation includes safety requirements and maintenance of metalworking tools, supplies, and equipment.

WELD 1251 Basic Arc Welding (2-2.3) Credit: 2

Provides the student with basic arc welding skills, includes selection of electrodes, heat ranges, types of joints, edge preparation, shop safety, and maintenance of equipment.

WELD 1301 Basic Gas Welding (1-2) Credit: 3

This course covers the theory and practice of oxyacetylene cutting and welding of metals in horizontal, vertical, and overhead positions.

WELD 1302 Basic Arc Welding (1-2) Credit: 3

This course covers the theory and practice of electric arc welding. Welds will be made in all positions with various types of electrodes.

WELD 1401 Beginning Gas Welding (3-3) Credit: 4

Instruction will be conducted in oxyacetylene welding theory and practical application. Course of study will include use and operation of oxyacetylene cutting equipment. Safety and proper care of oxyacetylene equipment will be stressed. Prerequisite or Corequisite: INDU 1400 or consent of the Department Chair.

WELD 1402 Beginning Arc Welding (3-3) Credit: 4

Instruction will be conducted in the theory and practical application of Shielded Metal Arc Welding with various types of electrodes in flat and horizontal positions. Course of study to include AWS electrode classification. Prerequisite or Corequisite: INDU 1400 and WELD 1401 or consent of the Department Chair.

WELD 1403 Intermediate Arc Welding (3-3) Credit: 4

Instruction will be given in the practice of making Shielded Metal Arc Welds in all positions. Emphasis will be placed on preparing the student for certification in the flat and horizontal positions with various types of electrodes. Prerequisite: WELD 1402.

WELD 1405 Advanced Gas Welding (3-3) Credit: 4

Instruction will be given on oxyacetylene welding in all positions and practical application of silver brazing and soft solder. Use of cutting machines will be included in the course of study. Prerequisite: WELD 1401.

WELD 1406 Blueprint for Welders (3-3) Credit: 4

This course covers the fundamentals of drawing interpretation as applied in the welding trade. Emphasis will be on welding symbols and their significance, familiarization with terms, sites, shapes, and abbreviations.

WELD 2401 Advanced Arc Welding (3-3) Credit: 4

Instruction will be given in the practice of taking guided bend test, with and without the use of back-up strips, in all positions. Emphasis will be placed on preparing students for certification in all positions with various types of electrodes. Prerequisite: WELD 1403.

- WELD 2402 Pipe I** (3-3) Credit: 4
Classroom instruction to be given on development of layout templates. Practical instruction will place emphasis on preparing the student for certification test on pipe. Prerequisite: WELD 1403.
- WELD 2404 Pipe II** (3-3) Credit: 4
Classroom instruction to be given on development of layout templates. Practical instruction will place emphasis on preparing the student for certification test on pipe. Prerequisite: WELD 2402.
- WELD 2406 Welding Fabrication & Layout** (3-3) Credit: 4
Practical application of steel fabrication and general layout work. Blueprint reading of welding prints with welding symbols will be included. Prerequisite: WELD 1406 and 2401.
- WELD 2407 GTAW Welding (TIG)** (3-3) Credit: 4
This course provides instruction in the theory and practice of Gas Tungsten Arc Welding (GTAW) of aluminum. The course of study includes types of power sources, shielding gases and metals. Welding is performed using 1/16, 3/32, and 1/8 tungsten rod in all positions. Prerequisites: WELD 1402 and 1405.
- WELD 2408 GMAW Welding (MIG)** (3-3) Credit: 4
This course covers the theory and practice of Gas Metal Arc Welding (GMAW) of mild steel and aluminum. The course of study includes the study of the types of metal transfer and shielding gases used in these processes. Welding will be performed in 1, 2, 3, and 4G positions using .035 wire feed. Prerequisite: WELD 1402 or ATBR 1409.

(WOPO) WORD PROCESSING

- WOPO 1101 MS-DOS: An Introduction** (1-5) Credit: 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 Word Perfect: An Introduction** (1-5) Credit: 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 covered: the basic Word Perfect program; document formatting, text entry, spell check, thesaurus, outlining, footnoting, merging letters, document saving, retrieving and editing; Word Perfect directory/files management; printer/font selection and control; and printing documents.
- WOPO 1103 Microsoft Word: An Introduction** (1-5) Credit: 1
A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on experience with lecture; includes demonstration, discussion/question/answer sessions. Topics covered: overview of word processing; structure of 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** (1-5) Credit: 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 1105 WordStar/Mail Merge** (1-1) Credit: 1
A 30-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on with minimum lecture; includes demonstration, discussion/question/answer sessions. Topics include: overview of WordStar structure; defining files; document formatting, text entry; creating form letters using Mail Merge; saving, retrieving and editing document files; WordStar directory/files management; printer/font selection and control; and printing.
- WOPO 1106 Enable: An Introduction** (1-1) Credit: 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** (1-5) Credit: 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** (1-5) Credit: 1
A 24-hour course for professional personnel, word processing operators, writers, editors, and publishers. Hands-on 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** (1-5) Credit: 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 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 a search criteria.
- WOPO 1303 Beginning Keyboarding/Data Entry** (3-3) Credit: 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** (3-3) Credit: 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** (3-3) Credit: 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 (3-3) Credit: 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. Prerequisite: Minimum typing skills of 40 WPM.

WOPO 1401 Word Processing Cooperative Training I (1-20) Credit: 4

This course consists of on-the-job word processing training that utilizes the principles, skills, and knowledge gained in the setting of the classroom. The student is employed at an approved work site under the supervision of Office Administration Department personnel.

WOPO 2302 Advanced Information Processing Applications (3-3) Credit: 3

This course includes advanced work in such specialized production as tabulation, interoffice correspondence, manuscripts, legal forms, medical forms, special interoffice forms, and additional work on the arrangement of business letters with special features. 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 (3-3) Credit: 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 (3-3) Credit: 3

Elementary 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.

WOPO 2306 Information Systems and Applications (3-3) Credit: 3

This course is designed to give secretarial, clerical, management, and word processing students an 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 2308 Information System Internship I (2-4) Credit: 3

The student will be provided a combination of occupationally related classroom instruction and on-the-job training in cooperation with offices within the Office Administration Department. Actual work training will be available in following areas: information processing, filing, duplication, telephone use, correspondence preparation, voice transcription machine, record keeping, proofreading, etc.

WOPO 2309 Information System Internship II (2-4) Credit: 3

Students will be provided a combination of occupationally related class work instruction and on-the-job training in cooperation with Office Administration offices. Students will demonstrate advanced competencies with work experiences in the following areas: taking dictation, information processing, letter composing, telephone procedures, filing work scheduling, financial calculating, duplication, transcribing from dictation equipment, etc.

WOPO 2310 Word Processing Center Management (3-0) Credit: 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.

WOPO 2401 Word Processing Cooperative Training II (1-20) Credit: 4

This course is a continuation of Word Processing Cooperative Training I. Prerequisite: WOPO 1401.

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 requests from area agencies such as the 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.

INDEX

Absences	14	Bookstore	9
Academic Load	14	BUSI/Business Courses	97
Academic Policies	14-15	Business Administration	40
Academic Standards	6	Business Management	41
Accounting Technology	29	Calendar	v
Accreditation	i	Certificate Requirements	22, 26
ACCT/Accounting Courses	83	Challenge Exams	3
ACTE/Accounting Technology Courses	83	Change of Address	20
Adding Classes	7	Changing A Grade	18
Address Changes	20	CHDV/Early Childhood Professions Courses	97-99
Administrative Secretarial	30	Cheating	20
Admissions	4	CHEM/Chemistry Courses	99-100
Admissions - Aviation Science Students	5	Chemistry	42
Admissions, Early	5	Class Behavior	21
Admissions - International Students	5	Classification, Student	15
Air Conditioning & Refrigeration	31	Classroom Visitors	19
AIRC/Air Conditioning Courses	84-85	CMET/Computer Electronics Technology Courses	100-101
ANTH/Anthropology Courses	85	COES/Consumer Electronics Technology Courses	101-102
APPH/Applied Physics Courses	85	College Level Exams (CLEP)	10
Applied Management	32-33	COMM/Communications Courses	102
Art	34	Commencement	26
ARTS/Art Courses	86-87	Common Course Numbers	16
ASCI/Aviation Science Courses	87-90	Communications Electronics Technology	43
Associate in Applied Science Degree	25	Computer Electronics Technology	44
Associate in Arts Degree	23	Computer Science	45-46
Associate in General Studies Degree	24	Consumer Electronics Technology	47
Associate in Science Degree	23	Continuing Education	172
ATBR/Automotive Body Repair Courses	90-91	COSCI/Computer Science Courses	102-105
Attendance Policy	14-15	Course Descriptions	83
Auditing Classes	19	Credit by Examination	10-11
AUTO/Automotive Service and Repair Courses	91-93	Credit Transfer	15
Automotive	35-36	CRIJ/Criminal Justice Courses	105-106
Aviation Maintenance Technology	37	Criminal Justice	48
Aviation Science	38	Degree/Certificate Programs	
Aviation Science Admission Requirements	5	Accounting Technology	29
AVMT/Aviation Maintenance Technology Courses	93-95	Administrative Secretarial	30
BIOL/Biology Courses	96	Air Conditioning & Refrigeration	31
Biology	39	Applied Management	32-33
Board of Trustees	ii		

Art	34	Transportation Technology	80
Automotive	35-36	Welding	81
Aviation Maintenance Technology	37	Word Processing	82
Aviation Science	38	Degree Requirements	23
Biology	39	Degrees Offered	23
Business Administration	40	Developmental Studies	22
Business Management	41	DIEM/Diesel Mechanics Courses	107-108
Chemistry	42	Diesel Mechanics	49
Communications Electronics Technology	43	Directory Information	20
Computer Electronics Technology	44	Disciplinary Action	21
Computer Science	45-46	Discrimination	4
Consumer Electronics Technology	47	Drafting and Design Computer-Aided Drafting	50
Criminal Justice	48	Drafting and Design Graphic Art Technology	50
Diesel Mechanics	49	DRDS/Drafting and Design Courses	108-109
Drafting and Design Computer-Aided Drafting	50	Dropping Classes	7
Drafting and Design Graphic Art Technology	50	Drug and Alcohol Abuse	20
Early Childhood Professions	51	DS--/Developmental Studies Courses	109-113
Education	52	E arly Admissions	5
Emergency Medical Technician	53	Early Childhood Professions	51
Engineering	54	ECON/Economics Courses	113-114
English	55	Education	52
Finance and Banking	56	Electives	28
Fire Protection Technology	57	ELTE/Communications Electronics	
Food Service Management	58	Technology Courses	114-115
Foreign Language	59	Emergency Medical Technician	53
General Studies	60	EMET/Emergency Medical	
Geology	61	Technician Courses	115-118
Hotel/Motel Management	62	Engineering	54
Kinesiology	63	ENGL/English Courses	119
Law Enforcement	64	English	55
Legal Assistant	65	ENGR/Engineering—Civil and	
Maintenance Technology	66	General Courses	119-120
Mathematics	67	Equal Opportunity Policy	4
Microcomputer Technology	68-69	Evaluation	10-12
Military Science Management	70	Executive Officers	ii
Office Management	71	F aculty	vi-xxii
Offset Printing	72	Falsification of Records	20
Photography	73	Fees	8
Physical Education	63	FIBA/Finance and Banking Courses	120-121
Real Estate	74	Finance and Banking	56
Small Gas Engine Repair	75	Financial Aid	12-14
Social Science	76	Fire Protection Technology	57
Speech	77	Food Service Management	58
Television/Radio/Telecommunications	78	Foreign Language	59
Training Management Systems	79		

FPRT/Fire Protection Technology Courses	121-123	Military Science Management	70
FREN/French Courses	123	Military Tuition Assistance	13
FSMG/Food Service Management Courses	123-126	MILS/Military Science Management Courses	142-146
GART/Graphic Arts Technology Courses	126-127	MISC/Microcomputer Technology Courses	146-148
General Studies	60	MTNT/Maintenance Technology Courses	149-150
GEOG/Geography Courses	127	MUSI/Music Courses	150-152
GEOL/Geology Courses	127	Name Changes	20
Geology	61	Non-Credit Courses	172
GERM/German Courses	128	Nontraditional Education	10
GOVT/Government Courses	128	OADM/Office Administration Courses	153-154
Grade, Change of	18	Office Management	71
Grade Point Average	18	Official Enrollment	7
Grading Policy	16	Official Withdrawal	15
Grading System	16	Offset Printing	72
Graduation	25-26	OPRT/Offset Printing Courses	154-155
Graduation Grade Requirements	18	Personnel	iii-iv
Grants	13	PHED/Physical Education Courses	155-157
Harassment	4	PHIL/Philosophy Courses	157
HIST/History Courses	128-129	PHOT/Photography Courses	157-158
History	1	Photography	73
HMMG/Hotel/Motel Management Courses	129-130	PHYS/Physical Sciences Courses	158-159
Honor Roll	18	Physical Education	63
Hotel/Motel Management	62	Plagiarism	20
HUMA/Humanities Course	130	Prerequisite Courses	27
INDU/Industrial Fundamentals Course	130	Privacy Act	6, 20
International Students	5	Probation	18-19
JAPN/Japanese Courses	131	Program & Course Availability	3, 27
Kinesiology	63	Programs of Study	27
Late Registration	7	PSYC/Psychology Courses	159
Law Enforcement	64	Readmission	5
LAWE/Law Enforcement Courses	131-133	RAE/Real Estate Courses	160-162
LEGA/Legal Assistant Courses	133-135	Real Estate	74
Legal Assistant	65	Records Access	20
Loans	13	Records Required, Transfer Students	6
Lost Certificate/Degree	26	Records Required for Admission	5-6
Maintenance Technology	66	Records Required, Transient Students	6
MATH/Mathematics Courses	136-137	Refunds	8-9
Mathematics	67	Registration	7
MGMT/Management Courses	137-142	Residency Requirements	12
Microcomputer Technology	68-69	Resident Credit	15
Military Credit	10-11	Scholastic Honesty	20
		Semester Credit Hours	27

Servicemembers Opportunity College	11
SGER/Small Gas Engine Repair Courses	162
Small Gas Engine Repair	75
SMMG/Supermarket Management Courses	163
SOCAD-2/SOCNAV-2	12
SOCI/Sociology Courses	163
Social Science	76
SPAN/Spanish Courses	163
SPCH/Speech Courses	164
Speech	77
Student Classification	15
Student Discipline	21
Student Financial Assistance	12
Suspension	19
T	
TAGA/Tagalog Course	164
Tardiness	14
TASP	6
TELE/Television/Radio	
Telecommunications Courses	164-166
Television/Radio/Telecommunications	78
Test Scores Required for Admission	5-6
Texas Academic Skills Program	6
Textbooks	9
TMTH/Technical Mathematics Course	166
Training Management Systems	79
TRAN/Transportation Courses	166-168
Transcript Ordering	9-10
Transcripts Required for Admission	5-6
Transfer Credit	6, 22
Transient Students	6
Transportation Technology	80
Tuition	8
Uniform Application of Standards	6
V	
Veteran Benefits	13
W	
WELD/Welding Courses	168-169
Welding	81
Withdrawal	15
WOPO/Word Processing Courses	169-171
Word Processing	82

1995

AUGUST

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

1996

JANUARY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

MARCH

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL

S	M	T	W	T	F	S
						6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

1997

JANUARY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOTES

CTC CONTINENTAL & INTERNATIONAL LOCATIONS

CENTRAL CAMPUS

Fort Hood
Killeen

CONTINENTAL CAMPUS

ALASKA

Fort Greely
Fort Richardson
Fort Wainwright

CALIFORNIA

Camp Pendleton

DISTRICT OF COLUMBIA

Bolling AFB
Walter Reed AMC

GEORGIA

Fort Stewart
Hunter Army Airfield

HAWAII

Fort Shafter
Schofield Barracks
Tripler Army Medical Center

KANSAS

Fort Riley

KENTUCKY

Fort Knox

LOUISIANA

Fort Polk

MARYLAND

Fort Meade

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

NAVY CAMPUS CALIFORNIA

Alameda
Lemoore NAS
San Diego

CONNECTICUT

New London

FLORIDA

Jacksonville
Mayport

HAWAII

Pearl Harbor

ILLINOIS

Great Lakes

PENNSYLVANIA

Philadelphia

RHODE ISLAND

Newport

SOUTH CAROLINA

Charleston

TENNESSEE

Millington

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

AZORES

Lajes

BELGIUM

NATO

SHAPE

EGYPT

Sinai-North Camp
Sinai-South Camp

GERMANY

Ansbach
Augsburg

Babenhausen

Bad Aibling

Bad Kreuznach

Bamberg

Baumholder

Buedingen

Darmstadt

Dexheim

Friedberg

Geilenkirchen

Grafenwoehr

Hanau

Heidelberg

Hohenfels

Illesheim

Kaiserslautern

Kirchgoens

Kitzingen

Mannheim

Ramstein

Rhein Main

Schweinfurt

Sembach

Spangdahlem

Stuttgart

Vilseck

Vogelweh

Wackerheim

Wiesbaden

Worms

Wuerzburg

HOLLAND

AFCENT

ICELAND

Keflavik

ITALY

Aviano

Camp Darby

La Maddalena

Naples

Sigonella

Vicenza

KUWAIT

Camp Doha

SAUDI ARABIA

Dahran

Riyad

SPAIN

Rota

TURKEY

Incirlık

Izmir

UNITED KINGDOM

Alconburg

Croughton

Lakenheath

London

Mildenhall

PACIFIC FAR EAST CAMPUS INDIAN OCEAN

Diego Garcia, BIOT

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

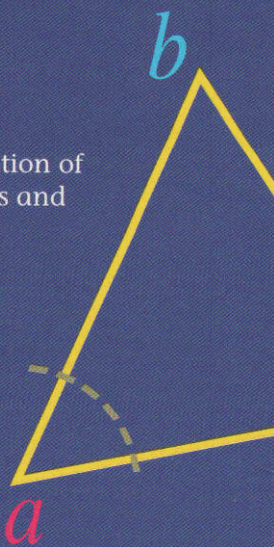
Torii Station

1995

1997

CENTRAL TEXAS COLLEGE

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.



$E=mc^2$