

Catalogue 1983-1985

# LOCATIONS SERVICED BY VARIOUS CENTRAL TEXAS COLLEGE PROGRAMS

UNITED STATES	Germany (cont'd)	Turkey (cont'd)
Alabama Ft. McClellan	<u>Crailsheim</u>	Ordykoy
Redstone Arsenal	Darmstadt	Sinop <b>PACIFIC FAR EAST</b>
Alaska	Dexheim Einsiedlerhof	Guam
Ft. Greely	Eschborn	Anderson Air Force Base
Ft. Richardson	Fischbach	NAVCAMS
_ Ft. Wainwright	Frankfurt	Naval Air Station
Colorado	Friedberg	INDIAN OCEAN
Ft. Carson	Fulda	Diego Garcia
Georgia Ft. Benning	Garlstadt Gelnhausen	JAPAN
Ft. Stewart	Gernnausen Giessen	Atsugi Camp Zama
Hunter Army Airfield	Goeppingen	Iwakuni
Hawaii	Grafenwoehr	Misawa Air Base
Pacific Far East Campus	Hahn	Sasebo
Pearl Harbor Wheeler Air Force Base	Hanau	Yokosuka
Florida	Hannheim	Yokota Air Base Korea
Mayport	Heidelberg Heilbronn	Camp Ames
Kansas	Hoechst	Camp Carroll
Ft. Riley	Hohenfels	Camp Casey
Kentucky	Idar Oberstein	Camp Greaves
Ft. Campbell	Illesheim	Сатр Нелгу
<b>Louisiana</b> Ft. Polk	Kaiserslautern	Camp Hovey
Maryland	Karlsruhe Kirchgoens	Camp Howze Camp Humphreys
Ft. Meade	Kitzingen	Camp Long
Massachusetts	Kriegsfield	Camp Market
Ft. Devens	Mainz	Camp Page
Missouri	Mannheim	Camp Pelham
Ft. Leonard Wood	Miesau	Camp Red Cloud
North Carolina Ft. Bragg	Neu Ulm Nurnberg	Camp Stanley Kwang-Ju Air Station
Pope Air Force Base	Oberursel	Kunsan Air Base
Oklahoma	Pirmasens	Osan Air Base
Ft. Sill	Ramstein	Pusan
South Carolina	Schweinfurt	Taegu Air Station
Charleston Texas	Schwaebish-Gmuend	Suwan Air Station
Ft, Hood	Semback Sepandahlam	Yongsan Okinawa
Killeen	Spangdahlem Stuttgart	Camp Butler
Virginia	Vilseck	Camp Courtney
Ft. Eustis	Vogelweh	Camp Foster
Ft. Lee	Wertheim	Camp Futenma
Ft. Monroe	Wiesbaden	Camp Hansen Camp Kinser
Ft. Story Norfolk	Wildflecken Wuerzburg	Camp McTureous
Washington	Zweibrucken	Kadena Air Base
Ft. Lewis	Greece	Torii Station
CENTRAL AMERICA	Drama	Philippines
Panama	Elefsis	Botan
Ft. Clayton Ft. Davis	Katsimdhi	Clark Air Base Camp O'Donnell
Ft. Kobbe	Kilkis Koropi	Cubi
EUROPE	Langada	San Miguel
Azores	Nea Makri	Subic Bay
Lajes Field	Yannitsa	Wallace Air Station
England	Italy .	•
Alconbury Bentwaters	Arizignano Pavelone	
Lakenheath	Bovolone Camp Darby	
Mildenhall	Ceggia	
Upper Heyford	Chioggia	
Germany	Codogne	
Amberg	Conselve	
Ansbach Aschaffenburg	Cordovado Oderzo	
Babenhausen	Pluto	
Bad Hersfeld	Sciaves	
Bad Kissengen	Verona	
Bad Kreuznach	Vicenza	
Bamberg Baumholder	Zelo	
Baumnoider Berlin	<b>Spain</b> Torrejon	
Bindlach	Turkey	
Bitburg	Cakmakli	
Buedingen	Corlu	
Butzbach	Erzurum	

## MAJOR CAMPUS ADDRESSES COLLEGE PROGRAMS

#### **CENTRAL CAMPUS**

CENTRAL TEXAS COLLEGE U.S. Highway 190 West Killeen, Texas 76542 1-817-526-1211

#### ALASKA

Central Texas College-Fort Richardson Building 658-Kiska Hall Fort Richardson, Alaska 99505

#### **EUROPE**

Central Texas College-Europe Yorkhof Kaserne Hanau Military Community APO New York 09165

#### FORT HOOD

Central Texas College U.S. Highway 190 West ATTN: Fort Hood Campus Killeen, Texas 76542

#### FORT LEE

Central Texas College-Fort Lee P.O. Box B Fort Lee, Virginia 23801

#### FORT LEONARD WOOD

Central Texas College-Fort Leonard Wood Truman Education Center-Box 216 Fort Leonard Wood, Missouri 65473

#### FORT RILEY

Central Texas College-Fort Riley P.O. Box 2406 (Bidg. 35) Fort Riley, Kansas 66442

#### JAPAN

Central Texas College Education Center - Japan Yokota Air Base 475 ABW/DPE/CTC APO San Francisco 96328

#### **KOREA**

Central Texas College-Far East APO San Francisco 96301

#### OKINAWA

Central Texas College USMC Base Education Camp S.D. Butler FPO Seattle 98773

#### PACIFIC FAR EAST

Central Texas College HQ, Pacific Far East Campus Wheeler Air Force Base Wheeler Air Force Base, Hawaii 96854

#### PANAMA

Central Texas College-Panama PSC Box M APO Miami 34004

#### POPE AFB

Central Texas College
Educational Services/DPE
Pope Air Force Base, North Carolina 28308

#### U.S. NAVY - PACE

Central Texas College-PACE (Pacific) 2223 Cajon Blvd. Suite 360 San Diego, California 92104

#### VOCATIONAL SKILLS CENTER

Central Texas College U.S. Highway 190 West Killeen, Texas 76542

## WESTERN PACIFIC (PHILIPPINES)

Central Texas College 3CSG/DPE/CTC APO San Francisco 96274

### CORRESPONDENCE AND INQUIRIES

Correspondence and inquiries should be addressed to the appropriate office, e.g. Admissions, Records, Financial Aid, etc., as listed in the catalogue, at the location where the student currently attends.

Students departing Central Texas College locations must notify the administrative office of their departure to insure their records are transferred to the System Office at Killeen, Texas. Records and transcript services will be provided through the System Registrar.

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

## **Board of Trustees**



Back Row (Standing) left to right: Marvin A. Mickan, Copperas Cove; Dr. Luis M. Morton, Jr., Chancellor, Central Texas College; Dr. W.A. Roach, President, Killeen; Mr. William L. Shine, Killeen.

Front Row (Seated) left to right: Mr. Cleo Bay, Killeen; Mrs. Linus D. Frederick, Secretary, Copperas Cove; Mr. Guinn C. Fergus, Treasurer, Killeen; Mr. J.A. Darossett, Vice President, Copperas Cove.

## Chancellor's Welcome

What an unusual story there is to tell about the growth and development of Central Texas College.

From modest beginnings this College has expanded its services across the nation and into foreign lands, in quest of its dedicated purpose..."to the service of the people"...

Why has this institution succeeded in such a dramatic fashion? Obviously, the reasons for success have been multiple. The people of this College District have supported this institution. The Board of Trustees, the administration and the faculty have worked in harmony to develop an educational system to serve the total career development needs of the local population, as well as the needs of military and civilian personnel throughout the world. Perhaps of greatest significance, the students have understood the frustrations of creating and expanding the institution to



fulfill its dedicated purpose. Like older brothers and sisters looking after the younger, they have sacrificed, helped and protected the institution through the years. Returning students and students to arrive at our doors in future years will be the benefactors of these unselfish contributions.

As we pass the one million mark in students served and as we reach the annual level of student enrollments to the quarter million mark, I feel compelled to thank the Board of Trustees, the college personnel, and the many friends who have helped this institution every step of the way.

On behalf of the Board of Trustees, the administration and the faculty, I take the sincere and simple pleasure of welcoming you to Central Texas College. Thank you.

Respectfully.

Luis M. Morton, Jr. Chancellor

S.M. Morton. 1.

# Central Texas College

Tenth 1983-1985

## GENERAL CATALOGUE

Accredited By Southern Association of Colleges and Schools

Approved By Coordinating Board, Texas College and University System Texas Education Agency

Listed In Report of Credit Given By American Association of Collegiate Registrars and Admissions Officers

and
Accredited Institutions of Postsecondary Education by
Council On Postsecondary Education

and Education Directory of Colleges and Universities by U.S. Department of Health, Education and Welfare

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Association of Texas Colleges and Universities
Servicemembers Opportunity College
Southern Association of Collegiate Registrars and Admissions Officers
Texas Association of Public Junior Colleges
Texas Association of Collegiate Registrars and Admission Officers

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## CENTRAL TEXAS COLLEGE

Following unparalleled achievement, Central Texas College, a public community college, has evolved from a barren field in Central Texas to a multimillion-dollar educational complex. It all began in 1965, when Central Texans voted to create a college district. From the beginning, the challenge was enormous. The question was clear—whether to develop a traditional community college or dare to create a master plan for the future. Only time would reveal that Central Texas College was destined to become a leader in providing educational services for the Twentieth Century.

The Board of Trustees, together with business and industrial personnel, educators, military leaders, and a dedicated staff under the guidance of Dr. Luis M. Morton, formed the master plan for one of the most successful educational experiences America has ever witnessed. The union of minds developed a totally new educational complex to serve the total career development needs of a local population, as well as the needs of military and civilian personnel throughout the world.

Considering cost effectiveness, efficiency, and immediate application to present needs and future growth, it was clearly recognized that no single educational institution could provide all the programs to meet the career development needs of people in commerce, business and industry, military, government, and the world society. Central Texas College provides a "total career educational program" beginning at the associate degree level of instruction. The organization represents unique educational offerings which contribute to the total effectiveness of services provided through education and training utilizing a myriad of delivery systems.

#### Worldwide Services:

Having initially supported the United States Army locally with a wide variety of educational programs tailored to meet the specific needs of the military, Central Texas College was chosen to serve our armed forces across the nation and overseas. This commitment to provide expanded educational opportunities carries the same thrust of dedication which is characteristic of Central Texas College.

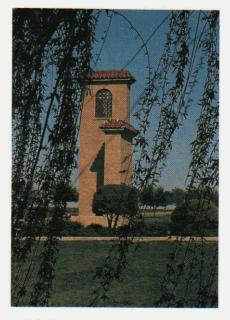
Central Texas College provides the opportunity for higher education to military personnel serving our country in the United States and in foreign lands. Technical-vocational programs are offered by the College at over 200 locations throughout Europe and the Far East, as well as at military bases in the United States and to the United States Navy, Pacific and Atlantic Fleets. For further information concerning College offerings around the world, the Continental and Overseas Catalogue Supplement should be consulted.

## Campus Scenes

Central Texas College claims many distinctions, one of which is its beautiful Killeen campus.

Central Texas College is located in the hill and lake country between Killeen and Copperas Cove. The classical Spanish exterior of each building is enriched by the soft blend of brick and mission tile roof.

Modern facilities, advanced instructional methods and an excellent faculty provide the maximum support to help each student succeed in whatever career he or she chooses.





## CENTRAL CAMPUS COLLEGE CALENDAR

The following calendar displays major activity dates of the academic year. Not all activities are displayed herein and students are cautioned to read bulletin boards and other announcements publishing dates of other scheduled academic and social activities.

Prior to each registration period, a detailed Schedule Bulletin is prepared, providing a final calendar of activities, registration procedures and schedules of course offerings. For administrative purposes, the Schedule Bulletin becomes the official calendar for the semester for which it is published.

This college calendar addresses only Central Campus activities. Students attending Central Texas College at other locations should contact Central Texas College officials serving their locations.

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SMIWIFSSMIWIFS	1983-1984		
JULY OCT	DATES	FALL 1983	
1 2 1	AUG 8 - 26	Registration	
3 4 5 6 7 8 9 2 3 4 5 6 7 8 10 11 12 13 14 15 16 9 10 11 12 13 14 15	AUG 24 - 25	Faculty In-Service Meetings	
17 18 19 20 21 22 23 16 17 18 19 20 21 22	AUG 24	Dormitory open for occupancy	
24 25 26 27 28 29 30 23 24 25 26 27 28 29 31 30 31	AUG 29	Classes Begin	
AUG NOV	AUG 29 - SEPT 2	Late Registration	
123456 12345	SEPT 5	Labor Day Holiday (no classes)	
7 8 9 10 11 12 13 6 7 8 9 10 11 12 14 15 16 17 18 19 20 13 14 15 16 17 18 19	SEPT 14	12th class day	
21 22 23 24 25 26 27 20 21 22 23 24 25 26 28 29 30 31 27 28 29 30	OCT 1	Last day to file for Fall graduation	
SEPT DEC	NOV 11	Veterans Day Holiday (No classes)	
32	NOV 16 - 17	Final exams - 12 week courses	
1 2 3 1 2 3 4 5 6 7 8 9 10 4 5 6 7 8 9 10	NOV 24 - 27	Thanksgiving Holiday (No classes)	
11 12 13 14 15 16 17 11 12 13 14 15 16 17 18 19 20 21 22 23 24 18 19 20 21 22 23 24	DEC 12 - 17	Final Exams - 16 week courses	
25 26 27 28 29 30 25 26 27 28 29 30 31	DATES	SPRING 1984	
JAN APR	IAN 3 - 13	Registration	
1 2 3 4 5 6 7 1 2 3 4 5 6 7	JAN 11 - 12	Faculty Meetings	
8 9 10 11 12 13 14 8 9 10 11 12 13 14 15 16 17 18 19 20 21 15 16 17 18 19 20 21	JAN 11	Dormitory open for occupancy	
22 23 24 25 26 27 28 22 23 24 25 26 27 28 29 30 31 29 30	JAN 16	Classes begin	
FEB MAY	JAN 31	12th class day	
1234 12345	FEB 1	Last day to file for Spring graduation	
5 6 7 8 9 10 11 6 7 8 9 10 11 12 12 13 14 15 16 17 18 13 14 15 16 17 18 19	MAR 12 - 16	Spring Vacation (No classes)	
19 20 21 22 23 24 25 20 21 22 23 24 25 26	APR 11 - 12	Final exams - 12 week courses	
26 27 28 29 27 28 29 30 31	MAY 4 - 10	Final exams - 16 week courses	
MAR 1 2 3	MAY 12	Graduation	
4 5 6 7 8 9 10	DATES	SUMMER 1984	
11 12 13 14 15 16 17 18 19 20 21 22 23 24		Summer Sessions (SSI and SS2)	
25 26 27 28 29 30 31		plus 11 week session.	
	MAY 14 - JUNE 1	Registration	
	MAY 30	Dormitory open for occupancy	
S M T W T F S S M T W T F S	JUNE 4	Classes begin, SSI and 11 week courses	
	JUNE 4 - 7	Late Registration SSI and 11 week courses	
MAY JUNE	JUNE 7	4th class day - SSI	
6 7 8 9 10 11 12 3 4 5 6 7 8 9	JUNE 11	Last day to file for Summer Graduation	
13 14 15 16 17 18 19 10 11 12 13 14 15 16 20 21 22 23 24 25 26 17 18 19 20 21 22 23	JUNE 13	8th class day - 11 week session	
27 28 29 30 31 24 25 26 27 28 29 30	JULY 4	Independence Day Holiday (no classes)	
	JULY 10	Final exams - 5½ week, SSI Courses	
	JULY 11 JULY 11- 13	Classes begin, SS2 Late registration SS2 courses only	
	JULY 16	4th class day - SS2 courses	
	AUG 15 - 16	Final exams for 11 week courses	
	AUG 16 - 10	Final Exams for 5½ week SS2	
		THE AMERICA OF WORK DOZ	

## COLLEGE CALENDAR 1984 - 1985

COLLEGE CALENDAR 1904 - 1985			
S M T W T F S   S M T W T F S	DATES	FALL 1984	
JULY OCT	AUG 14 - 31	Registration	
1 2 3 4 5 6 7 1 2 3 4 5 6 8 9 10 11 12 13 14 7 8 9 10 11 12 13	AUG 29 - 30	Faculty In-Service Meetings	
15 16 17 18 19 20 21 14 15 16 17 18 19 20	AUG 29	Dormitory open for occupancy	
22 23 24 25 26 27 28 21 22 23 24 25 26 27 29 30 31 28 29 30 31	SEPT 3	Labor Day Holiday (no classes)	
A110	SEPT 4	Classes begin	
AUG NOV	SEPT 4 - 7	Late Registration	
5 6 7 8 9 10 11 4 5 6 7 8 9 10	SEPT 19	12th class day	
12 L3 L4 L5 L6 L7 LX 11 L2 L3 L4 L5 L6 L7	OCT 1	•	
19 20 21 22 23 24 25 18 19 20 21 22 23 24 26 27 28 29 30 31 25 26 27 28 29 30		Last day to file for Fall graduation	
SEPT DEC	NOV 12	Veterans Day Holiday (no classes)	
1 1	NOV 20 - 21	Final exams - 12 week courses	
2345678234567R	NOV 22 - 25	Thanksgiving Holiday (no classes)	
16 17 18 19 20 21 22 16 17 18 19 20 21 22	DEC 17- 22	Final exams - 16 week courses	
23 24 25 26 27 28 29 23 24 25 26 27 28 29 30 30 31	DATES	SPRING 1985	
30 31	JAN 2 - 11	Registration	
S M T W T F S S M T W F F S	JAN 9 - 10	Faculty Meetings	
JAN APR	JAN 9	Dormitory open for occupancy	
1 2 3 4 5 1 2 3 4 5 6 6 7 8 9 10 11 12 7 8 9 10 11 12 13	JAN 14	Classes begin	
13 14 15 16 17 18 19 14 15 16 17 18 19 20	JAN 29	12th class day	
20 21 22 23 24 25 26 21 22 23 24 25 26 27 27 28 29 30 31 28 29 30	FEB 1	Last day to file for Spring graduation	
FEB MAY	MAR 11 - 15	Spring Vacation (no classes)	
1 2 1 2 3 4	APR 10 - 11	Final exams - 12 week courses	
	Ark IV - II	Lillai exallis - 15 Meek chalses	
3 4 5 6 7 8 9 5 6 7 8 9 10 11	MAY 3 - 9	Final exams - 16 week courses	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25			
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 29 30 31	MAY 3 - 9 MAY 11	Final exams - 16 week courses Graduation	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 29 30 31 MAR	MAY 3 - 9	Final exams - 16 week courses Graduation SUMMER 1985	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 26 27 28 29 30 31 MAR  3 4 5 6 7 8 9	MAY 3 - 9 MAY 11	Final exams - 16 week courses Graduation  SUMMER 1985  Summer Sessions (SSI and SS2) plus	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 26 27 28 29 30 31 MAR  3 4 5 6 7 8 9 10 11 12 13 14 15 16	MAY 3 - 9 MAY 11 <b>DATES</b>	Final exams - 16 week courses Graduation  SUMMER 1985  Summer Sessions (SSI and SS2) plus 11 week session.	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 26 27 28 29 30 31 MAR  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 3 - 9 MAY 11 <b>DATES</b> MAY 13 - JUNE 1	Final exams - 16 week courses Graduation  SUMMER 1985 Summer Sessions (SSI and SS2) plus 11 week session. Registration	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 26 27 28 29 30 31 MAR  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	MAY 3 - 9 MAY 11 DATES MAY 13 - JUNE 1 MAY 27	Final exams - 16 week courses Graduation  SUMMER 1985 Summer Sessions (SSI and SS2) plus 11 week session. Registration Memorial Day Holiday (No classes)	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 26 27 28 29 30 31 MAR  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 3 - 9 MAY 11 <b>DATES</b> MAY 13 - JUNE 1	Final exams - 16 week courses Graduation  SUMMER 1985  Summer Sessions (SSI and SS2) plus 11 week session.  Registration Memorial Day Holiday (No classes) Dormitory open for occupancy	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 26 27 28 29 30 31 MAR  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 3 - 9 MAY 11 DATES MAY 13 - JUNE 1 MAY 27	Final exams - 16 week courses Graduation  SUMMER 1985 Summer Sessions (SSI and SS2) plus 11 week session. Registration Memorial Day Holiday (No classes) Dormitory open for occupancy Classes begin SSI and 11 week courses	
3 4 5 6 7 8 9 5 6 7 8 9 10 11 10 11 12 13 14 15 16 12 13 14 15 16 17 18 17 18 19 20 21 22 23 19 20 21 22 23 24 25 24 25 26 27 28 26 27 28 29 30 31  MAR  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	MAY 3 - 9 MAY 11 <b>DATES</b> MAY 13 - JUNE 1 MAY 27 MAY 29	Final exams - 16 week courses Graduation  SUMMER 1985 Summer Sessions (SSI and SS2) plus 11 week session. Registration Memorial Day Holiday (No classes) Dormitory open for occupancy Classes begin SSI and 11 week courses Late registration, SSI and 11 week courses	
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## COLLEGE CALENDAR 1984 - 1985















Graduation

### CENTRAL CAMPUS

#### 1983-84 Faculty

Harold W. Adams, Faculty (1969) INDUSTRIAL TECHNOLOGY

Diesel Mechanics

Certificate: Detroit Diesel Training Center/Cummins Diesel Training

Additional Study: East Texas State University

Wynona W. Alexander, Department Manager (1969, 1974)

Art

ART B.A. East Texas State University/M.A. East Texas State University

Ph. D. North Texas State University

Additional Graduate Study: Sam Houston State University

Mary Alfred, Instructor/Coordinator (1982)

Office Occupations

VOCATIONAL SKILLS CENTER

A.A. Central Texas College/B.S. American Technological University

Teaching Degree. University of the West Indies

Graduate Study; American Technological University

Henry E. Blake, Department Manager. (1967)

Criminal Justice

CRIMINAL JUSTICE

A.A.S. Brooklyn College/B.S. John Jay College of Criminal Justice

M.A. Baylor University/M.P.A. Nova University/D.P.A. Nova University

Additional Graduate Study: Texas Christian University

Gayle J. Blum, Instructor (1980)

Associate Degree Nursing

NURSING

Diploma: Hillcrest School of Nursing/B.S.N. University of Mary Hardin-Baylor

M.S.N. Texas Women's University

I. Parker Bogue, Faculty [1973]

History

SOCIAL SCIENCE

B.A. University of Maine/M.A. University of Maryland

Ph.D. University of Maryland

John W. Brewer, Faculty (1978)

Air Conditioning

INDUSTRIAL TECHNOLOGY

B.S. American Technological University/M.S. American Technological University

Emily Bronstein, Instructor

Associate Degree Nursing

NURSING

B.S. Medical College of Georgia/M.S. Emory University

Paula A. Bugay, Faculty (1979, 1980)

Associate Degree Nursing

NURSING

Diploma: Akron City Hospital School of Nursing

B.S.N. University of Akron/M.S.N. University of Texas at San Antonio

Wayne L. Caldwell, Department Manager (1974)

Offset Printing

VOCATIONAL SKILLS CENTER

Elizabeth L. Cheatham, Faculty (1974)

Office Administration

OFFICE ADMINISTRATION

B.A. Louisiana Tech University/M.B.A. Louisiana Tech University

Additional Graduate Study: North Texas State University/University of Texas at Austin

Tarleton State University

Diesel Charles Clark, Instructor (1981)

VOCATIONAL SKILLS CENTER

A.A. Central Texas College/B.S. Columbia

Pacific University

Barbara Considine, Instructor (1979)

VOCATIONAL SKILLS CENTER

B.A. Mansfield State College

John Cornelius, Director of Mid-Management Programs (1978, 1980) Mid-Management

BUSINESS MANAGEMENT

B.A. Texas Christian University/M.S. American Technological University

Jo A. Cranford, Faculty (1978)

OFFICE ADMINISTRATION B.A. Baylor University/M.A. Texas A&I University

B. J. Cummings, Instructor (1982)

VOCATIONAL SKILLS CENTER

Mary C. Feild, Faculty (1973) Office Administration

OFFICE ADMINISTRATION

B.A. Lamar University/M.A. University of Texas at Austin

Mark L. Fitch, Instructor (1981)

CAREER PILOT

B.A.S. Texas State Technical Institute Certificate: FAA Commercial, Instrument & Multi-Engine Ratings, Instructor Ratings

Ronald R. Fitz-Randolph, Faculty (1981)

Computer Science

Math, Reading, English

Office Administration

**Auto Body Repair** 

Career Pilot

COMPUTER SCIENCE

B.A. University of Oklahoma/M.S. American Technological University

Joan Fontana, Instructor (1982)

Associate Degree Nursing

B.S. Sacred Heart Dominion College/M.S. Marsh University

Frances H. Forgione, Faculty (1975)

Associate Degree Nursing

NURSING

B.S.N. Niagara University/M.S.N. Texas Women's University

Adel M. Galanffy, Department Manager (1967, 1973)

Piano

MUSIC

M.M. Franz Liszt Music Conservatory

James D. Gebhardt, Flight Instructor (1978, 1981)

Director of Airport Operations

CAREER PILOT

A.A.S. Central Texas College/B.A.S. University of Mary Hardin-Baylor

Certificate: Airline Transport Rating/Instructor Ratings

Single & Multi-Engine Instrument Ratings

Curtis Gibson, Instructor (1981)

Career Pilot

CAREER PILOT

B.S. East Carolina University/M.S. American Technological University

Certificate: FAA Commercial, Instrument & Multi-Engine Ratings, Instructor Ratings

Jane M. Gibson, Instructor (1979)

Intensive English/Foreign Language

COMMUNICATIONS

B.A. Abilene Christian University/M.A.T. Southwest Texas State University

Donna S. Giebler, Faculty (1976, 1980)

Office Administration

OFFICE ADMINISTRATION

B.S. Howard Payne College/M.S. Ed. Howard Payne College

**Audrie E. Hall, Faculty (1976, 1978)** 

Electronics

**ELECTRONICS** 

B.S. Lamar State University/M.B.A. Stephen F. Austin University

Timothy R. Hall, Department Manager (1969, 1974)

Mathematics

MATHEMATICS

B.A. Oklahoma State University/M.S. West Texas State University

William G. Handorf, Faculty (1969, 1976)

Psychology/Sociology

SOCIAL SCIENCE

A.A. Morton Junior College/B.A. Northwestern University
M.A. Northwestern University/Ed.D. American University

Additional Graduate Study: University of Michigan

John L. Henderson, Faculty (1970)

English

COMMUNICATIONS

B.A. West Texas State University/M.A. West Texas State University

Patrick K. Hidy, Faculty (1976)

Biology

SCIENCE

A.A.S. Phillips County Community College

B.S. East Texas State University/M.S. East Texas State University

Lewis M. Hilley, Department Manager (1979)

Physical Education

PHYSICAL EDUCATION

A.B. Baylor University/M.Ed. University of Texas at Austin

Ed.D. University of Texas at Austin

Additional Graduate Study: University of Oklahoma/Philippine Institute

Washington and Lee University

Mildred Housman, Instructor (1982)

Medical Secretary/Medical Records

VOCATIONAL SKILLS CENTER

B.S. University of Mary Hardin-Baylor

Erdeene V. Hyde, Department Manager (1968, 1976)

English/Reading

COMMUNICATIONS

B.A. Bethany Nazarene College/M.A. East Texas State University

Additional Graduate Study: Texas Tech University

Truell W. Hyde, Department Manager (1968)

History

SOCIAL SCIENCE

B.S. Texas Tech University/M.Ed. Texas Tech University

Additional Graduate Study: University of Texas at Austin

Patricia A. Jarczewski, Division Director (1976, 1981)

**Associate Degree Nursing** 

NURSING

B.S.N. University of Mary Hardin-Baylor/M.S.N. Texas Women's University

Katherine Jackson Instructor (1981)

Medical Secretary/Medical Records

VOCATIONAL SKILLS CENTER

Edward B. Jasuta, Jr., Director (1970, 1980)

Telecommunications

TELECOMMUNICATIONS

B.A. University of Texas at El Paso

Graduate Study: American Technological University

Jeanette M. Jost, Faculty (1978, 1981)

Associate Degree Nursing

NURSING

Diploma: Scott & White Hospital School of Nursing

B.S.N. University of Mary Hardin-Baylor/M.S. American Technological University

Barbara A. Kimes, Faculty (1973)

Mathematics

MATHEMATICS

B.A. University of Texas at Austin/M.A. University of Texas at Austin

Ed.D. East Texas State University

Edward F. King, Instructor (1975)

Chemistry/Physics

SCIENCE

B.S. Loyola University of the South/B.A. Gregorian University

Ph.D. University of New Orleans

Jack L. Kinn, Faculty (1980)

Computer Science

COMPUTER SCIENCE

B.G.S. University of Nebraska at Omaha/M.S.B.A. Boston University

Peter W. Knightes, Instructor (1982)

Geology

SCIENCE

B.S. State University College at Oneonta, New York/M. Ed. Texas A&M University

Earl H. Kramer, Faculty (1972)

Automotive Service & Repair

INDUSTRIAL TECHNOLOGY

Billie J. Laney, Faculty (1970)

Psychology/Sociology

SOCIAL SCIENCE

B.A. Southern Methodist University/M.A. East Texas State University

Ph.D. East Texas State University

Ray Stanley Laney, Division Director (1969)

Business/Management

BUSINESS MANAGEMENT

B.B.A. University of Texas at Austin

M.S. East Texas State University/Ph.D. East Texas State University

John J. Lister, Faculty (1975)

Accounting

**BUSINESS MANAGEMENT** 

B.S. University of Colorado/M.S. Florida Institute of Technology

C.P.A. State of Texas

Karen Lowe, Instructor (1980)

English, Math, Reading

VOCATIONAL SKILLS CENTER

B.A. Southwestern Oklahoma State University

Reginald L. Ludwig, Associate Dean (1970, 1982)

Automotive Service & Repair

INDUSTRIAL TECHNOLOGY

B.S. American Technological University/M.S. American Technological University

Additional Graduate Study: East Texas State University

Gloria L. Lyons, Faculty (1974)

**Associate Degree Nursing** 

NURSING

B.S.N. Winston Salem University/M.S.N. Texas Women's University

Herbert J. Maglietta, Department Manager (1974)

**Drafting & Design** 

DRAFTING & DESIGN

B.S. Southwest Texas State University/M.Ed. Southwest Texas State University

Catherine M. Mason, Department Manager (1976, 1978)

Child Development

CHILD DEVELOPMENT

B.S. American Technological University/M.S. Texas Women's University

Ashby Lee Melton, Sr. Instructor (1983)

Auto Mechanics

VOCATIONAL SKILLS CENTER

Marilynn R. Neumann, Instructor (1982)

Associate Degree Nursing

NURSING

B.S. University of Michigan/M.S. University of Michigan

Mary W. O'Connor, Instructor (1982)

**Vocational Nursing** 

NURSING

B.S.N. St. Louis University

Edgar A. Odom, Faculty/Director of Police Academy (1975)

Criminal Justice

CRIMINAL JUSTICE

A.A. Central Texas College/B.S. American Technological University

M.C.J. American Technological University

Thena E. Parrott, Instructor (1983)

Associate Degree Nursing

NURSING

B.S.N. Baylor University/M.S.N. Texas Women's University

Mary R. Pihlak, Instructor (1982)

Associate Degree Nursing

NURSING

B.A. University of Texas at Austin

B.S.N. University of Texas System School of Nursing

M.S.N. University of Texas at Austin

Gary R. Ragsdale, Department Manager (1971)

Office Administration

OFFICE ADMINISTRATION

B.S. Abilene Christian University/M.B.A. Abilene Christian University

Ed.D. Arizona State University

Carl Rasberry, Instructor (1980)

Welding

VOCATIONAL SKILLS CENTER

Paula J. Ray, Faculty (1976, 1980)

Biology

SCIENCE

B.S. Kansas State University/M.S. Kansas State University

M.S. American Technological University

Additional Graduate Study: University of Wisconsin

Patricia L. Reid, Faculty (1980)

Vocational Nursing

NURSING

Diploma: Jameson Memorial Hospital/Additional Study: West Minister College

Central Texas College

James R. Reynolds, Faculty (1976)

Career Pilot

CAREER PILOT

A.A.S. Central Texas College/B.A.S. University of Mary Hardin-Baylor

Certificate: FAA Commercial, Instrument & Multi-Engine Ratings, Instructor Ratings,

Flight Engineer Ratings

Shirley L. Robertson, Instructor (1981)

Associate Degree Nursing

NURSING

B.S. Texas Christian University/M.S. University of Texas

Computer Science

#### D. Gail Robinson, Department Manager (1973, 1980)

COMPUTER SCIENCE

A.A.S. Central Texas College/B.S. American Technological University

M.S. American Technological University

Additional Graduate Study: East Texas State University

#### Theodore C. Robinson, Sr., Faculty (1971, 1974)

Computer Science

COMPUTER SCIENCE

B.S. American Technological University/M.S. American Technological University Additional Graduate Study: East Texas State University/Corpus Christi State University

#### Lee Roy Rose, Faculty (1976)

Automotive Service & Repair

INDUSTRIAL TECHNOLOGY

#### Max L. Rudolph, Faculty (1979)

Radio

TELECOMMUNICATIONS

A.A.S. Central Texas College/B.S. American Technological University Graduate Study: American Technological University

#### Gus D. Rummel, Department Manager (1970)

Computer Maintenance

**ELECTRONICS** 

B.S. University of Houston/M.S. American Technological University

#### Darold Schneider, Instructor (1980)

**Building Maintenance** 

VOCATIONAL SKILLS CENTER

B.S. American Technological University

#### Ralph D. Searle, Department Manager (1968)

Career Pilot

CAREER PILOT

B.G.E. University of Omaha/M.S. American Technological University Certificate: FAA Commercial, Instrument & Multi-Engine Ratings, Instructor Ratings

#### Shane K. Simon, Faculty [1981]

Speech

COMMUNICATIONS

B.S. Southwest Texas State University/M.A. Southwest Texas State University

#### Noel M. Smith, Sr., Faculty (1977)

Drafting & Design

DRAFTING & DESIGN

B.S. University of Houston/M.S. North Carolina State College

#### Ed Spence, Department Manager (1972, 1978)

Food Service & Hotel/Motel

HOSPITALITY INDUSTRY

B.S. University of Mary Hardin-Baylor/M.S. American Technological University

#### Antonio V. Suarez-Barrio, Instructor/Coordinator (1973)

Criminal Justice

CRIMINAL JUSTICE

A.A. Yuba College/B.S. University of Nebraska

M.S. American Technological University/M.C.J. American Technological University

M.P.A. Nova University/D.P.A. Nova University

Additional Graduate Study: National Training Center of Polygraph Science

Texas A&M University

Licensed & Certified Polygraphist, State of Texas & Department of Defense

Licensed & Certified Forensic Hypnotist, State of Texas

## Gloria B. Szokoly, Day Care Center Director, Instructor (1981, 1982) Child Development CHILD DEVELOPMENT

B.S.M. Wesleyan College

Ella Teague, Faculty (1968)

Physical Education

PHYSICAL EDUCATION

B.S. Sul Ross State University/M.Ed. Sul Ross State University Additional Graduate Study: University of Texas at Austin

Texas Tech University

Ray Thompson, Faculty (1976) OFFSET PRINTING

Offset Printing

Dora Thrash, Faculty [1974]

Associate Degree Nursing

NURSING

B.S.N. Prairie View/M.S.N. Texas Women's University

Edwin E. Throm, Instructor (1980)

**Auto Body** 

**VOCATIONAL SKILLS CENTER** 

A.A. Central Texas College/B.S. American Technological University

H. Alian Tolbert, Faculty (1969, 1980)

Mid-Management

**BUSINESS MANAGEMENT** 

B.S. Texas Tech University/M.A. Texas Tech University

Certificate: Flight Instructor/Instrument Flight Instructor/Ground Instructor

Naver G. Terres, Jr., Faculty (1975, 1979)

Photography

TELECOMMUNICATIONS

A.A.S. Central Texas College/B.S. American Technological University

Graduate Study: East Texas State University

Clarence Tresler, Assistant Division Manager (1970) Air Conditioning/Solar Energy

INDUSTRIAL TECHNOLOGY

B.S. University of Houston

M.S. American Technological University

Charles L. VanBibber, Foculty (1977)

Criminal Justice

CRIMINAL JUSTICE

A.A. Central Texas College/B.A. American Technological University

M.C.I. American Technological University

Henry R. Wessels, Faculty (1974, 1980)

Aviation Maintenance Technology

CAREER PILOT

Diploma: Spartan School of Aeronautics/A.A.S. Central Texas College

B.A.S. University of Mary Hardin-Baylor

Certificate: Commercial & Multi-Engine Pilot Ratings/Instructor Ratings

Airframe & Powerplant Rating & FAA Designated Maintenance Examiner

Aircraft Inspection Authorization

Beverly J. Wickersham, Faculty (1976)

English

COMMUNICATIONS

B.A. Baylor University/M.A. Sam Houston State University

Additional Graduate Study: Stephen F. Austin State University

University of Texas at Austin

Pam I. Wilkinson, Instructor (1982)

**Vocational Nursing** 

NURSING

A.A.S. Angelo State University

Dennis L. Williams, Foculty (1969)

English

COMMUNICATIONS

B.A. Texas Christian University/Graduate Study: Sul Ross State University

Texas Tech University

#### Norman R. Williams, Department Manager (1968)

Biology

SCIENCE

B.S. Texas Tech University/M.S. Texas Tech University

Additional Graduate Study: East Texas State University/University of Kansas

Texas A&M University

#### Raiford Williams, Department Manager (1968)

Agriculture

FARM & RANCH MANAGEMENT

B.S. Sam Houston State University/M.S. Sam Houston State University Ed.D. University of Missouri at Columbia

#### Ronald K. Witcher, Faculty [1973, 1976]

Electronics

**ELECTRONICS** 

Diploma: Draughon's Electronics Institute/A.S. Central Texas College

B.S. American Technological University/Graduate Study: Tarleton State University

#### Kenneth J. Word, Faculty (1977)

Mathematics

MATHEMATICS

A.S. Central Texas College/B.S. Southwest Texas State University

M.A. Southwest Texas State University

Graduate Study: University of Texas at Austin

#### Donnie D. Yeilding, Faculty (1982)

English

COMMUNICATIONS

B.A. Steven F. Austin State University/M.Ed. Steven F. Austin State University Additional Graduate Study: American Technological University Baylor University

#### Thomas D. Yeilding, Faculty (1981)

Government

SOCIAL SCIENCE

B.A. Hardin-Simmons University/M.A. Hardin-Simmons University

Ph. D. North Texas State University

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



## GENERAL INFORMATION

#### HISTORY

To provide increased opportunities in higher education, the voters of the Killeen and Copperas Cove Independent School Districts and the Nolanville Common School District created the Central Texas Union Junior College District in July, 1965. A \$2,000,000 bond issue to construct and equip the campus followed in October, 1965. In January, 1966, the Board of Trustees employed Dr. Luis M. Morton as President of Central Texas College and offices were opened in Killeen that same month. In June of that same year, ground breaking ceremonies were held and the first classes were held in September 1967. Since that time Central Texas College has expanded its physical plant to the present twenty-nine buildings. Current student population at the Killeen Campus is approximately 5,000 per semester.

The 560-acre campus, located on U.S. Highway 190 between Killeen and Copperas Cove, Texas, was dedicated "...to the service of the people..." on December 12, 1967, by the 36th President of the United States, Lyndon Baines Johnson.

#### EDUCATIONAL PHILOSOPHY

Central Texas College is dedicated to the philosophy that in a democracy, the well-being of the individual, as well as the whole of the society, depends upon the sound moral and educational development of its people. Since education is an individual, evolutionary, and never-ending process, the College curricula are both flexible and extensive.

In order to ensure the fullest service possible to the civilians of the surrounding area, to the personnel of the large military installation adjacent to the Killeen campus and to the personnel of military installations around the world, the educational programs of the College are designed to meet the needs of full-time and part-time students. To accommodate diverse educational needs, Central Texas College provides a variety of educational programs.

The objective of Central Texas College is to become a total learning environment, encompassing traditional and non-traditional forms of education. The guiding principle of the total learning environment is the College's commitment to meet the real educational needs of all the people. The College proposes to make available, in its total environment, the opportunity to achieve success in life, which is the birthright of every American.

## **EDUCATIONAL OBJECTIVES**

- UNIVERSITY PARALLEL EDUCATION The College provides the first two years of study for those students who expect to transfer to a senior college or university to complete a baccalaureate or professional degree.
- 2. GENERAL EDUCATION The College provides general education courses which develop competence, skills, and attitudes essential to effective performance as an individual, as a citizen, and as a productive member of society. Within this academic framework are studies in communication and languages, social sciences and humanities, mathematics, physical and social development, as well as a program of co-curricular activities.
- 3. OCCUPATIONAL EDUCATION The College offers comprehensive curricula and individual courses in day, evening and weekend classes to students who are interested in preparing for careers in a variety of business, health, industrial, and technical occupations. Transfer of these credits to senior colleges and universities offering baccalaureate degrees in technology or applied science is possible for those students seeking advanced study.

- 4. CONTINUING EDUCATION SERVICES The College provides continuing education for adults, including opportunities for cultural enrichment, special interest courses, lectures and meetings. Continuing education services are provided to individual adults, business, industrial, and military organizations.
- COUNSELING AND PERSONAL GUIDANCE The College provides counseling and guidance services which enable the student to select, with proper perspective, the educational program that is compatible with individual abilities, aptitudes and ambitions.
- PLACEMENT The College provides an employment/placement service to assist graduating students and alumni in bringing their qualifications to the attention of possible employers.
- RESEARCH Through a sponsored activity, the Research Institute for Advanced Technology, the College provides computer and telecommunications services and conducts energy and educational research.
- SKILLS TRAINING Through a support activity, the Vocational Skills Center, the College provides individualized vocational skills training programs.

#### THE CATALOGUE

This catalogue is an official bulletin of Central Texas College containing policies, regulations, procedures, tuition and fees in effect at the time this catalogue 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 Law, and tuition and/or fee changes. The catalogue serves two purposes; first to provide general policy for all Central Texas College operations and second; to provide specific information, policy and directives for the Texas Campuses. Rules, regulations and procedures for the Continental and Overseas Campuses are found in the Central Texas College Continental and Overseas Bulletins.

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

Other official bulletins published by the College include the Catalogue Supplement describing policies, procedures, regulations and fees for campuses outside the State of Texas, and the Student Handbook, which includes the institution's policies and regulations relating to student conduct and student activities at the Central Campus.

## **EQUAL OPPORTUNITY POLICY**

Central Texas College admits students without regard to race, color, sex, age, religion, national origin or handicap. This policy also applies to the employment of all personnel, faculty and staff.

## PROGRAM/COURSE AVAILABILITY

Programs of study displayed in this catalogue 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.

# ADMISSIONS AND REGISTRATION GENERAL ADMISSION INFORMATION

Requests for application materials or questions concerning admission should be addressed to the Admissions Office.

Central Texas College is an open-door comprehensive community college. An open-door admission policy is maintained to insure that all persons who may benefit from post-secondary education have the opportunity to enroll. New students will be admitted to the College providing all admission requirements are met. American College Test (ACT) or Scholastic Aptitude Test (SAT) entrance examinations are recommended for admission counseling. Students are encouraged to submit applications and ACT or SAT scores early in order to facilitate their pre-registration advisement process.

Admission to the College does not guarantee admission to specific programs and courses. Departmental approval is required to register for certain courses, as published in the registration schedule.

#### **ADMISSION REQUIREMENTS - ALL STUDENTS**

Students who hold diplomas from accredited secondary (high) schools or 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 to certain areas of study if, in the judgment of College officials, such study will be of value to the individual. NOTE: An adult, for purposes of admission, is defined as an individual 18 years of age or older.

## **FORMS REQUIRED**

In addition to the above criteria, students must complete an Application for Admission and provide residency certification prior to being considered for admission.

## **RECORDS REQUIRED**

#### TRANSCRIPTS AND TEST SCORES

Records of all previous education must be on file with the Records Office prior to admission.

- 1. HIGH SCHOOL GRADUATES: Must submit official high school transcript.
- 2. HIGH SCHOOL EQUIVALENCY GRADUATES: Must submit High School General Education Development (GED) scores.
- COLLEGE TRANSFER STUDENTS: Official transcript must be provided for all college study before official degree plans are provided.
- INDIVIDUAL ADMISSIONS STUDENTS (except transient students): Must provide official transcripts for all previously attended institutions, high school and/or college, and/or GED scores.

NOTE: Students are responsible for requesting their official records (signed and sealed) to be forwarded directly from the issuing institution to the Central Texas College campus serving the student's location. Addresses are listed in the front of the catalogue.

#### TRANSIENT STUDENTS

Students not seeking a degree or certificate from Central Texas College are not required to provide previous education records, as noted above. Records will be required if student later elects to seek a diploma or certificate.

#### READMISSION REQUIREMENTS

Central Texas College students who have missed one semester or more at the College must recomplete 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 ADMISSION**

Early admission offers the opportunity for high school juniors and seniors to earn college credits while concurrently enrolled in high school. Early admission is open to any high school junior or senior, subject to the following conditions:

- a) An Early Admission Form with the signatures of high school principal or counselor\* and parent or legal guardian must be submitted.
- b) Student must provide an official high school transcript.
- c) 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.

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

#### INTERNATIONAL STUDENTS

#### INTERNATIONAL ADMISSION REQUIREMENTS (Texas Campuses Only):

Sixty days prior to intended registration, in addition to completing Application and Admission requirements, international students must provide:

- 1. IMMIGRANT AND REFUGEE STUDENTS:
- a) Immigrant Card, or
- b) I-94 Refugee permit
- 2. NON-IMMIGRANT ALIEN STUDENTS: (applies to all students holding visa category A-M issued by U.S. Immigration and Naturalization Service):
- a) Official copy of transcript for last four years of secondary school. The official transcript must be an original copy translated into English and must show each course completed and grade earned.
- b) Official copy of transcript from each college or university attended. All foreign transcripts must be certified English translations.

NOTE: Transcripts must bear original mark or seal and signature of the Registrar to be acceptable.

- c) Test of English as a Foreign Language (TOEFL): Minimum acceptable score is 450.
- d) Financial Statement indicating sufficient funding for tuition, fees, and personal expenses.
- e) Tuition Deposit A non-refundable deposit of \$100 must be on file with the Admissions Office prior to issuance of Form I-20. The \$100 will be applied toward tuition.
- f) Dormitory Application and deposit.
- g) Compliance with all requirements and procedures established for visa category by U.S. Immigration and Naturalization Service.

International students wishing to apply to Central Texas College should address inquiries to the Director of International Student Services, who will provide forms and instructions to complete the requirements above.

## DEPARTMENTAL ADMISSIONS REQUIREMENTS

#### NURSING STUDENTS

Students entering the Associate Degree program, in addition to completing regular admission procedures, must also meet the following:

#### 1. Nursing Admission Requirements:

- a) ACT (American College Testing program). Minimum composite score of 17 or equivalent SAT score of 780.
- b) Personal interview with a member of the Nursing Department.
- Nursing Application Requirements: Each prospective Associate Degree Nursing student must submit directly to the Nursing Department the following items by the deadlines indicated:

For admission in the Fall Semester - by June 1 For admission in the Spring Semester - by October 1

- a) Application Form for Nursing.
- b) Physical exam results attesting to good health, signed by a licensed physician.

#### CAREER PILOT STUDENTS

All career pilot 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 Department Manager at the time of pre-registration advisement for admission to this department.

## UNIFORM APPLICATION OF STANDARDS

The standards of college policy relative to the academic status of the student and all matters relating to that student are uniform at all locations serviced by Central Texas College. The subsequent sections of the catalogue provide information required and unique to Texas campuses.

#### CENTRAL TEXAS COLLEGE TEXAS CAMPUSES

Central Texas College provides services at four Texas campuses which include:

- Central Campuses located between Killeen and Copperas Cove, Texas.
- Fort Hood Campus located within the College District at Fort Hood, Texas.
- Continuing Education Services located between Killeen and Copperas Cove, Texas, with services offered at various locations throughout the seven county service area.
- Central Texas Vocational Skills Center located between Copperas Cove and Killeen, Texas.

The following pages provide data and information particularly applicable to these students.

#### REGISTRATION

#### **NEW STUDENT PRE-REGISTRATION ADVISEMENT**

All first-time students will be required to participate in the pre-registration advisement process on campus. This process includes meeting with counseling staff and referral to other specialized services, such as Financial Aid and Veterans Affairs.

#### WHEN TO REGISTER FOR CLASS

#### **REGISTRATION PERIODS**

Registration periods for regularly scheduled classes are tentatively scheduled in the college calendar published in this catalogue. Specific times, dates, and class information are published separately in the class schedule bulletin, distributed prior to each registration period.

Special registrations are conducted for classes offered at locations other than the Central campus and for courses scheduled other than in the semester calendar. Details of special registration are published and distributed separately.

#### LATE REGISTRATION

Students are permitted to register late as published in the Schedule Bulletin. Students who complete registration after courses begin are not excused from meeting attendance or academic requirements and must arrange with the instructor to make up any assignments missed. No students are permitted to register after the scheduled late registration date.

## **COURSE ADMISSION**

#### TO BE OFFICIALLY REGISTERED

Students must complete the published registration procedure each term, including payment of all tuition and fees, to gain admission to classes. Installment paying of tuition is not permitted. Students who withdraw are not entitled to remain in class on an unofficial basis.

WITHDRAWAL - see page 27.

## **COST OF CLASSES**

#### TUITION AND FEES

All tuition and fees are subject to change without notice. All tuition and fees must be paid at the time of enrollment. A student is not officially registered until payment is made in full. Until all the student's obligations to the college have been satisfied, the student may not graduate or have transcript(s) issued. For tuition and fee schedules in effect at the time of publication, see page 7.

## **SCHEDULE OF TUITION AND FEES**

## CENTRAL CAMPUS 1983-1985 TUITION

Semester Hours	Resident	Non-Resident	International
1	\$ 30.00	\$ 100.00	<b>\$</b> 100.00
2	30.00	125.00	125.00
3	40.00	150.00	150.00
4	48.00	175.00	175.00
5	56.00	180.00	200.00
6	62.00	210.00	240.00
7	70.00	225.00	280.00
8	78.00	250.00	320.00
9	82.00	275.00	360.00
10	97.00	285.00	400.00
11	101.00	295.00	440.00
12	105.00	300.00	480.00
13	109.00	310.00	520.00
14	113.00	320.00	560.00
15	117.00	330.00	600.00
16	121.00	340.00	640.00
17	125.00	350.00	680.00
18	129.00	360.00	720.00

## INDIVIDUALIZED INSTRUCTION (Tuition in addition to above semester hour tuition)

Aviation Maintenance\$75.00	Food Service
Career Pilot	FSMG 1401\$ 30.00
CAPI 1300\$1475.00	FSMG 240130.00
CAPI 13041420.00	FSMG 240230.00
CAPI 23041715.00	Music
CAPI 23052245.00	Piano and Voice
CAPI 23061250.00	1 Semester Credit Hour90.00
CAPI 23081195.00	2 Semester Credit Hours140.00
CAPI 23092780.00	3 Semester Credit Hours160.00
CAPI 23101570.00	Photography20.00
CAPI 23112120.00	Physical Education
CAPI 23121030.00	Bowling30.00
CAPI 23132290.00	Off Campus Courses25.00
CAPI 23145600.00	Welding
CAPI 23152465.00	4 Semester Credit Hours50.00
Criminal Justice	
Firearms 25.00	

#### **FEES**

LABORATORY FEE (All Laboratory Courses)\$	8.00
GED Testing	
Graduation	15.00
Transcript/Records**(per copy)	2.00
Institutional Challenge Exam	30.00
Meal Card Replacement	15.00
Pre-registration Fee	10.00
RETURNED CHECK FEE	0.00
RENT, ROOM & BOARD, AND DEPOSITS  Dormitory Property Deposit	
Campus Apartments (monthly rental) One-Bedroom Apartment	75.00 15.00
Student Resident Hall Room and Board Plan (Per Semester)  Five-Day Plan — Fall and Spring (16 weeks)	14.50
Seven-Day Plan - Summer	12.00

 without Linens
 5.00

 Daily Occupancy Rate (with board)
 13.50

 with Linens
 16.00

 without Linens
 13.50

# REFUNDS OF RENT, ROOM AND BOARD AND DEPOSITS

RENT - Refunded on a pro-rata basis after deductions for repair, cleaning, etc.

DEPOSITS - Refunded after deduction for repair, cleaning, etc.

ROOM CHARGES - Non-refundable.

BOARD CHARGES - Refundable on pro-rata basis.

## **REFUNDS OF TUITION AND FEES**

No tuition refunds will be made except in the case of course cancellation or official withdrawal from the college or from a course.

All refunds for tuition will be computed from the date the Application for Withdrawal/Refund is filed with the Records Office (not from the date of last attendance) according to the following schedule:

<sup>\*</sup>NOTE: All tuition and fees are subject to change as approved by the Board of Trustees.

<sup>\*\*</sup>NOTE: Refund of overpayment of transcript/record fees will be made only upon written application of the student.

<sup>\*\*\*</sup>NOTE: All rent, room and board charges are subject to change as approved by the Board of Trustees.

Students who officially withdraw from the institution shall have their tuition and mandatory fees refunded according to the following schedule.

#### Fall and Spring Semesters

Prior to the first class day - 100%
During the first five class days - 80%
During the second five class days - 70%
During the third five class days - 50%
During the fourth five class days - 25%
After the fourth five class days - NONE

#### Summer Semesters

Prior to the first class day - 100% During the first, second or third class day - 80% During the fourth, fifth or sixth class day - 50% After the sixth class day - NONE

Students who reduce their semester credit hour load by officially dropping a course or courses and remain enrolled at the institution will have applicable tuition and fees refunded according to the following schedule:

	Regular Session
During the first twelve class days	100%
After the twelfth class day	NONE
	Summer Session
During the first four class days	100%
After the fourth class day	NONE
· ·	

- Tuition and fees paid directly to the institution by a sponsor, donor, or scholarship shall be refunded to the source rather than directly to the student.
- 4. Adjusted tuition and fees schedules, based upon the above guidelines, will be utilized in determining refunds for students enrolled in courses which vary in length from the regular and summer sessions.
- 5. 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 tuition refund schedule listed above.
- Class day count begins with the first day of instruction (the first calendar day of the term) and includes all weekdays, Monday through Friday, which are not designated college holidays.

## RESIDENCE CLASSIFICATION

The responsibility of registering under the proper residence classification is that of the student. If a student has any question concerning residence classification as a resident of Texas, it is the student's obligation to raise the question with the Registrar prior to registration. A STUDENT WHO IS A LEGAL NON-RESIDENT, BUT WHO REGISTERS AS A RESIDENT, IS SUBJECT TO DISCIPLINARY ACTION.

Copies of the Rules and Regulations for Determining Residence Status, Coordinating Board, Texas College and University System, may be obtained from the Registrar or the Records Office. Below is a summary of this publication. It should not be construed to cover all situations.

#### CITIZENS OF THE UNITED STATES OF AMERICA

RESIDENT: An individual 18 years or older who moves into Texas and is gainfully employed within the state for a period of 12 consecutive months immediately prior to enrolling is entitled to classification as a resident. The legal residence of an individual under 18 years of age is ordinarily that of the father.

NON-RESIDENT: An individual 18 years or older who resides outside Texas or who has not been a resident of Texas for 12 months subsequent to his 18th birthday, or for 12 months immediately preceding the date of registration, is classified a non-resident. An individual under 18 years of age whose family resides in another state, or whose family has not resided in Texas for the 12 months immediately preceding the date of registration, is classified a non-resident.

For any person over 18 years of age who has not established separate residence from parents, dependency upon a parent may be considered in determining classification.

#### CITIZENS OF ANY COUNTRY OTHER THAN THE U.S.A.

An alien living in the United States under a visa permitting permanent residence, or one who has filed with proper Federal authorities a declaration of intention to become a citizen, has the same privilege of qualifying for Texas resident status for tuition purposes as has a citizen of the United States.

Aliens who are not permanent residents of the United States will be classified as foreign students.

#### **EXEMPTIONS**

Under certain conditions a non-resident student is entitled to pay the same tuition as a resident of Texas. A request for an exemption should be made at the Records Office prior to registration. Documentation to support exemption request is required:

- The non-resident student who marries a person who is, at that time, a resident of Texas is
  entitled to pay resident tuition at the following registration. The legal residence of a husband
  and wife are normally presumed to be the same; however, it is possible for either the husband
  or wife to establish a residence different from the other.
- 2. Members of the Armed Forces who are assigned to active duty in Texas are entitled to enroll themselves, their spouse, and their dependent children by paying resident tuition.

NOTE: Military personnel, separating from active duty service, whose home of record is other than Texas are not automatically considered residents for tuition purposes.

- 3. A student employed by the college at least half-time may pay resident tuition while employed.
- If a non-resident receives a competitive scholarship of at least \$200 per academic year, he
  may pay resident tuition during the registration period in which the scholarship is in effect.

## RECORDS ACCESS

#### STUDENT RECORDS

The following information concerning student records maintained by Central Texas College is published in compliance with the Family Education Rights and Privacy Act of 1974 as amended.

Access to records by persons other than the student will be limited to those persons and agencies specified in the statute. Records will be maintained of persons granted such access.

Further information concerning access to student records is available through the Office of the Dean of Student Services and the Registrar's Office.

# STUDENT SERVICES

### COUNSELING

As a service to students and to the community, Central Texas College maintains a staff of professional counselors, in addition to faculty advisors in each instructional program.

The counseling center functions to assist students in making intelligent decisions regarding their vocational, educational, and personal-social plans. As a part of this program, counselors assist in interpretation of tests, inventories, and occupational and educational information.

## **COURSE PLANNING**

Proper planning of courses is important for each student in order to assure that individual objectives may be attained. Guidance in educational planning is available to students and prospective students through the Admissions and Counseling Office, by appointment and at announced registration periods. Students who are undecided as to their major field of study should contact the Admissions and Counseling Office for assistance in course planning before beginning the registration process. Students who have decided on a major field of study should contact the appropriate Department Advisor for assistance in course planning. Final responsibility for a proper and successful educational venture rests with the student.

## CAREER PLACEMENT SERVICES

The Career Placement Services Office provides career planning and placement services for students and alumni seeking part-time and full-time employment. Placement personnel assist students in obtaining positions compatible with their education and experience.

Students interested in this service should register with the Placement Office and provide an individual credential file (application/resumes and reference letters) to be maintained by the Placement Office. These files will be forwarded to prospective employers when requested by the candidate for employment.

Students requiring part-time and seasonal employment are encouraged to use the job listing service of the Placement Office.

Representatives of business and industry seeking potential employees may contact the Placement Office for information and to arrange interviews with the student when appropriate.

# INTERNATIONAL STUDENT ADVISEMENT

Central Texas College maintains a special office and staff to assist non-resident alien students in matters related to their enrollment. Services include admissions assistance and academic counseling.

Inquiries should be addressed to the Director of International Student Services at the Central Campus address listed in front of the catalogue.

## LEARNING RESOURCE CENTER

Free individualized, self-paced instruction by open entry/open exit registration is available all year round. Texts, modules, audio-visuals, and supplies are dispensed from the Learning Resource Center. Classes are provided for review in the areas listed below:

Adult Basic Education (ABE)
General Education Development (GED)
English-as-a-Second Language (ESL)
Mathematics and English preparation for College
Mathematics and English instruction for pursing students

# PROJECT MAINSTREAM

Project Mainstream provides tutorial instruction in specific vocational and required academic classes to improve student scholastic performance. Counseling is conducted for orientation, college re-entry, personal, academic and vocational concerns with emphasis on goal setting and decision-making. Additionally, students are linked to institutional or off-campus resources designed to improve the student's opportunities for development and success.

Project Mainstream improves student retention and increases student transfer for further education or successful entry into career opportunities. Services include diagnostic mathematics and reading comprehension assessment, remedial instruction, study and employability skills training workshops, information and referral services.

## HANDICAPPED STUDENT SERVICES

The Handicapped Student Services Program provides individualized assistance to persons who are physically and/or sensorially impaired. Students are encouraged to explore and successfully pursue a wide range of educational or vocational training. Services offered are:

- \* Career Exploration and Guidance
- Iob Placement Assistance
- \* Mobility/Personal Aides
- Notetakers and Reader Service
- Outreach and Orientation Activities
- \* Specialized Counseling
- \* Specialized Testing and/or Seating Arrangements
- Tape Recorder and Calculator Loan Service
- \* Updated Information on Political Issues of Importance to the Handicapped

## TESTING SERVICES

Central Texas College provides an extensive testing program for interested students and residents of the area. For further information and testing dates, individuals may contact the Testing and Evaluations Office at the Central Campus address listed in the front of the catalogue.

ENTRANCE EXAMINATIONS - The ACT (American College Test) is administered by Central Texas College on five national test dates each year. It is recommended that all new students who have not previously taken the ACT or SAT (Scholastic Aptitude Test) take the ACT for guidance purposes.

ADVANCED STANDING EXAMINATIONS - CLEP (College Level Examination Program) examinations, which are nationally prepared tests for students desiring to receive credit for knowledge already obtained, are administered by Central Texas College two days each month. By this means students may accelerate their college program and may take courses at the next higher level.

OCCUPATIONAL AND CAREER TESTING - The CPP (Career Planning Profile), the Strong-Campbell Vocational Interest Inventory and the DAT (Differential Aptitude Test) are available to help inventory interests in a variety of occupations. The ACT Assessment also assists students in making educational and career decisions.

HIGH SCHOOL EQUIVALENCY EXAMINATION - Central Texas College offers the GED (General Education Development) examination for those who have not completed a formal high school education. The successful completion of this examination may result in a certificate of high school equivalency.

INSTITUTIONAL CHALLENGE EXAMINATIONS — Students may request, through the appropriate Department Manager, permission to take challenge examinations for certain courses. An application for challenging a course must be completed and returned to the Testing Office with the appropriate non-refundable fee. The student will then coordinate with the Testing Office or department for the time and place to take the examination. Failure to appear for the examination will result in the loss of the challenge fee. Students must not have previously enrolled in the course for college level credit.

To obtain credit, the student must pass the examination with a grade of "A" or "B" and have completed a minimum of 6 semester hours of course work at Central Texas College with a minimum of a 2.0 grade point average.

**TOEFL (INSTITUTIONAL TESTING PROGRAM)** - Test of English as a Foreign Language, administered to all international students except those from English speaking countries.

**OTHER TESTS** - Central Texas College also administers other tests as may be useful to people of the community. For a complete listing of available tests or additional information, students are invited to contact the Testing Office.

## EVALUATION OF PREVIOUS EDUCATION

#### TRANSFER STUDENTS

Transfer of credit from accredited colleges and universities may be accepted when the grade earned was "C" or better and the course work 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.

#### NON-TRADITIONAL 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 non-traditional learning experiences and to award course credit in all cases where such credit is appropriate. In keeping with this policy, Central Texas College has established the Individualized Career Evaluation Process (ICEP).

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

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

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

- The Defense Activity for Non-Traditional Educational Support (DANTES) Courses and Subject Standardized Tests.
- College Level Examination Program (CLEP) both the General Examination and Subject Examination.

- 3. Institutional Course Challenge Examinations.
- Credit for military schools attended as recommended by the American Council on Education and recognized by Central Texas College.
- 5. Credit for Physical Education and Psychology 1101 for military service.
- MOS Training and Experience as recommended by the American Council on Education and recognized by Central Texas College.
- 7. American College Testing Program (ACT).
- 8. College Board Admission Testing Program.
- Correspondence/Extension Courses offered by accredited institutions which are members
  of the National University Extension Association.
- 10. Other To include certain types of civilian training and specialized testing.

#### **EVALUATION PROCEDURES**

Curriculum plans outlining accepted transfer and/or non-traditional credit as well as remaining requirements are available from college, Military Education Center or Navy campus advisors upon student request.

Final degree plans are provided upon receipt of all official transcripts and documents. Evaluated credit must be validated through successful completion ("C" grade or higher) of a minimum of six semester hours of traditional credit, earned at Central Texas College.

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 your area. Addresses are listed in the front of this catalogue.

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) 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 non-traditional learning experiences, scheduling, course format, and residency requirements are provided to enhance servicemembers access 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 other similiarly accredited institutions consistent with servicemembers' degree programs.

- \*Requires only twelve semester hours Central Texas College coursework to establish residency.
- \*Recognizes as study in residence all credit coursework offered by the college.
- \*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 EXPERIENCE IN THE ARMED FORCES.
- \*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 non-traditional learning assessment programs.

# SOCAD DEGREE COMPLETION AGREEMENT

All students can continue their Central Texas College degree programs regardless of location. Through the "credit bank" provisions of the Servicemembers Opportunity College, a student may study at any other accredited college and apply the work toward Central Texas College degree requirements, so long as 12 semester hours with a minimum 2.00 G.P.A. have been completed with Central Texas College, and the courses taken at other institutions satisfy the requirements of the Central Texas College degree program. Requests for SOCAD agreements should be addressed to the SOCAD Advisor, at the administrative office serving the student's location. Addresses are listed in the front of this catalogue.

Students no longer attending Central Texas College who previously completed the minimum residency/GPA requirements may request a SOCAD Agreement by writing to:

Central Texas College System ATTN: Dean of Student Services Highway 190 West Killeen, Texas 76542

## STUDENT ACTIVITIES

Social and cultural activities play an important part in the life of the college student. Often classroom instruction can be supplemented and enhanced by a well-developed program of activities. Central Texas College believes that in order to develop good qualities of leadership and to help create good fellowship and social goodwill, each student should be given the opportunity to develop to his or her full potential.

In support of this philosophy, two offices have been established to support and guide student development. Both the Student Services Office and the Student Activities Office provide informal opportunities for individual and group interaction. An organized program of student-to-student and student-faculty related activities is provided to help each student gain insight and understanding of self, society and the quality of life.

Fifteen clubs and organizations, officially approved, in addition to the Council of Student Representatives, operate on the main campus. Clubs include religious, political, social and recreational organizations. Activities of the various clubs and organizations are coordinated at weekly or bimonthly meetings. Movies, speakers, dances, workshops, concerts and related programs are also presented.

# **ROY J. SMITH STUDENT CENTER**

This building, which provides the setting for many student activities, also becomes a gathering place for students during leisure time. It is one of the most popular buildings on campus.

The center houses a bookstore, dining area, inner landscaped court, snack bar, and a carpeted lounge area with a wood-burning fireplace, beamed ceiling and color television. A large game room and a spacious recreation center complete with pinball machines, pool tables and video games is provided.

## CHILD DEVELOPMENT CENTER

Central Texas College has a Child Development Center for training adults to work with young children. The Center, located on Clear Creek Road, is licensed to care for 67 children. It is open to children of the community, Central Texas College students, faculty and staff.

Children, 3-5 years of age, experiment and explore in an environment conducive to learning. The developmental program allows each child to advance through stimulating activities. Central Texas College students assist in daily planning under qualified instructors.

## FOOD SERVICE

Hot and cold food, full meals or snacks, and beverages are available from the cafeteria or the snack bar located in the Roy J. Smith Student Center.

## **BOOKSTORE**

The College operates a bookstore for the convenience of students and staff. New and used textbooks, supplies and equipment, and a selection of general merchandise are available. Textbook buy-back policies are printed in the Student Handbook.

### INTRACOLLEGIATE SPORTS

Intracollegiate sports programs have been organized for both men and women. These programs include football, basketball, volleyball, softball, table tennis, and tennis. Students interested in participating in these activities should contact the Intracollegiate Sports Office in the gymnasium.

## GYMNASIUM AND DORMITORY POOL

The college gymnasium and dormitory swimming pool are open during specified times for student use. Rules and regulations regarding use and access are published in the Student Handbook.

## **HOUSING**

#### DORMITORY

Requests for dormitory rooms should be addressed to the Housing Office located in the Student Center. Central Texas College operates a modern, air-conditioned dormitory for full-time male and female students. Room requests are honored on a first-come, first-served basis. A reservation deposit of \$100.00 is required for each room application. This deposit is not refundable after 30 days prior to the beginning of the semester for which it was first intended. Five-day and seven-day board plans are available. Payments for dormitory and board may be made in equal installments. Dormitory policy and regulations will be supplied by the Housing Office upon request.

#### CAMPUS HOUSING

Air-conditioned and carpeted student apartments located on campus are available for married couples. Those interested may apply through the Married Student Housing Office to rent unfurnished or furnished, one or two bedroom apartments. The Housing Office is located in the Student Center.

# PARKING FACILITIES

Parking space is available to students who desire to bring their cars to the campus. Each student who drives and parks a car on campus will be required to register the car with the college. Vehicle registration is conducted during announced registration periods. For vehicle registration at other times, see the Student Handbook. Students, faculty and staff will be required to park in designated parking areas and are required to display the campus parking permit decal. Parking and traffic regulations are set forth in detail in the Student Handbook.

### LIBRARY

The Oveta Culp Hobby Memorial Library is an outstanding junior college library. Over 60,000 hard-bound volumes and over 70,000 volume equivalents on microfiche are housed in this beautifully appointed building which was dedicated to a native of Killeen, the first Secretary of the Department of Health, Education and Welfare.

Audiovisual resources and other advanced facilities to assist the student in reading and research are located in the library.

### COPYING SERVICE

Duplicating services may be purchased at the Library, the Student Center, and other coinoperated copy machines located on campus.

## STUDENT FINANCIAL AID PROGRAMS

Central Texas College participates in numerous financial aid programs designed to assist students who demonstrate financial need and show education ability. Students who participate in the various programs for financial aid must comply with the rules and regulations of the College, as well as those of the program itself, to retain eligibility for the programs. Federal regulations require financial aid recipients to make satisfactory progress toward their current degree objective. Academic transcripts are monitored and financial aid will be denied when a student falls within the probationary status as defined in the current college catalogue. Appeal of denied financial aid may be made to the Financial Aid Review Committee.

Central Texas College participates in the following financial assistance programs:

**PELL GRANT:** The PELL Grant is authorized by the Higher Education Act Amendments of 1972 to assist students in pursuing their first undergraduate degree. The intent of the PELL Grant is to provide a foundation of financial assistance to supplement the cost of postsecondary education. The amount of the PELL award is based on the actual cost of the student's education while attending Central Texas College. Applications are available in the Office of Student Financial Aid.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG): This grant, authorized by the Higher Education Act Amendments of 1972, is available only to those students who demonstrate financial need. The grants under the program range from \$200 to \$2,000 per academic year. Grant awards and renewals are made on the basis of demonstrated financial need and satisfactory academic progress. To be considered for the SEOG, a student must complete the Family Financial Statement from the needs analysis services of one of the central processing agencies. This form is available in the Office of Student Financial Aid.

TEXAS PUBLIC EDUCATIONAL GRANT: The TPEG is a State of Texas grant program available to students who are Texas residents and who demonstrate financial need. The student must be enrolled half-time (6 semester hours or more) to be considered for this grant. Application for the TPEG is the Family Financial Statement from the needs analysis services of one of the central processing agencies. This form is available in the Office of Student Financial Aid.

GOVERNMENT STUDENT LOAN (GSL): An undergraduate student may borrow up to \$2,500 per academic year with an aggregate loan limit of \$12,500. For further information, contact the Office of Student Financial Aid.

**COLLEGE WORK-STUDY PROGRAM:** This program provides part-time employment opportunities for students who are in need of earnings in order to complete their educational goals. In arranging a job and determining how many hours per week a student may work, the Financial Aid Officer will consider: (1) financial need; (2) class schedule; and (3) student's health and academic progress. To be considered for the CWSP, a student must complete the Family Financial Statement from the needs analysis services of one of the central processing agencies. This form is available in the Office of Student Financial Aid.

NATIONAL DIRECT STUDENT LOAN: Central Texas College participates in the NDSL Program as authorized by the National Defense Education Act of 1958. Interest rate on the loan is 5% per annum beginning six months after the date on which the borrower ceases to carry at least 6 semester hours of coursework. The minimum repayment is \$30 per month with a maximum repayment period of ten years. Awards are based on financial need and academic performance. Interested students must complete the Family Financial Statement from the needs analysis services of one of the central processing agencies.

**GUARANTEED INSURED STUDENT LOAN:** These are loans secured from a lending agency such as a bank, savings and loan association, credit union, etc., but are guaranteed by the Federal Government.

The interest rate is 9% per annum simple interest. The Government will pay the interest charge while the student is enrolled at least half-time. Repayment begins six months after graduation.

Interested students should obtain detailed information and application forms directly from lending institutions.

THE CENTRAL TEXAS COLLEGE SCHOLARSHIP FUND: Central Texas College annually awards several two-year \$1,200 scholastic scholarships to qualified high school students who reside within the seven county Central Texas College service area. Information regarding this scholarship program may be obtained from the Office of Student Financial Aid.

**SCHOLARSHIPS:** Information regarding various scholarship programs available to Central Texas College students may be obtained from the Office of Student Financial Aid.

Inquiries concerning student financial aid should be sent to the Office of Student Financial Aid.

## VETERAN BENEFITS

Central Texas College is an approved college for those who wish to attend and receive benefits under the Veterans Readjustment Benefits Act of 1966 and Post-Vietnam Era Veterans Educational Assistance Program and dependents qualified for VA Educational Benefits.

Students attending with the aid of veteran benefits should inquire at the Office of Veterans Services, prior to registration, to obtain needed information relative to their enrollment and "certification" of attendance to the Veteran Administration. All new students must furnish the Veterans Services Office an original copy of DD 214 or a copy certified by the County Clerk. The veteran must also furnish certified copies of marriage certificates, divorce and dependents' birth certificates, if any.

Students must provide an approved, signed degree plan to the Veterans Services office prior to certification of their initial semester. Degree plans are available through the Admissions and Counseling Office or through Departmental Advisors. Transfer students should have copies of all previous transcripts for initial counseling sessions. It is the student's responsibility to inform the Office of Veterans Services of any changes in enrollment status. The monthly rates of payment to Veterans are provided for by Public Law 94-502.

\*Note: Students must advise the Veterans Services Office of courses enrolled in each semester.

Veterans should have military credit evaluated by the close of the first semester and furnish the Veterans Services Office with a copy of the up-dated degree plan. Also, any transfer credits from prior education need to be evaluated before the close of the first semester and a copy of up-dated degree plan furnished to the Veterans Services Office.

## MILITARY EDUCATION BENEFITS

Active duty military personnel may wish to attend Central Texas College under the military Tuition Assistance Program which pays for 75% to 90% of tuition. (Department of Defense Appropriations Act of 1966, O.L. 80-213.) Information and application for military Tuition Assistance are available through Military Education Centers or Navy Campus offices.

## VOCATIONAL REHABILITATION

The Texas Rehabilitation Commission offers assistance for tuition to students who have certain physical disabilities, provided the vocational objective selected by the disabled person has been approved by a representative of the Commission. Application for this assistance should be made to the nearest Texas Rehabilitation Office. (Refers only to Texas campuses.)

# COLLEGE POLICIES AND REGULATIONS

## ACADEMIC POLICY

#### ACADEMIC LOAD:

Students are responsible for determining the academic load they may successfully complete during each semester.

PSYC 1101: College orientation is required of all beginning students taking 12 semester hours or more and of all transfer students with less than 24 hours of earned credit who have not previously satisfied course requirements.

FULL TIME: Students registering for 12 or more semester hours during Fall or Spring semesters are considered to be full time students. Students who register for 8 or more semester hours during the eleven week summer session or 4 or more semester hours during the first or second summer session are considered to be full time students.

NORMAL LOAD: The normal load for students wishing to complete degree requirements in two academic years is 15 to 18 semester hours per term, depending upon the number of one-semester-hour courses taken.

MAXIMUM LOAD: No student will be permitted to enroll for six academic courses or for more than 18 semester hours without the approval of the Dean of the College. The maximum load for a six-week session is eight semester hours and the maximum credit that a student can earn during the entire summer session is fourteen semester hours. The College reserves the right to limit the course load carried by any student.

MINIMUM LOAD: No minimum load is required.

NOTE: Students attending college with Financial Aid or Veterans Benefits assistance may be required to meet academic course load standards other than those noted above. Details should be obtained from the Student Financial Aid Office prior to registering for courses.

## ATTENDANCE POLICY

#### **ABSENCES AND TARDINESS**

Students are required to attend regularly all classes in which they have enrolled. Students are required to be in classrooms on time.

#### ABSENCES

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.

#### **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: Forty-eight (48) class hour course = 6.0 class hours.

The following specific rules apply to absences:

- 1. A class meeting of 50 minutes equals 1 absence.
- 2. Instructors shall keep a record of class attendance.
- An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The course will be noted as an "F" on the roll and record book.

4. As a matter of policy, administrative excuses from classes are not provided for any reason. Regardless of the reason for the absence, students are responsible for completing all course work covered during any absence.

# ARE YOU OFFICIALLY ENROLLED

#### CLASS MEMBERSHIP

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 an official student 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.

## YOUR CLASSIFICATION IS

FRESHMAN - with thirty semester hours or less recorded on your permanent record.

SOPHOMORE - with thirty-one semester hours or more recorded on your permanent record.

## RESIDENT CREDIT

#### **ALL CAMPUSES**

A student may earn an Associate Degree entirely through study at campuses outside the State of Texas or in combination with study at the Central Campus. At least twelve semester hours 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 TRANSFERS

#### TO OTHER COLLEGES AND UNIVERSITIES

Central Texas College is accredited by the Southern Association of Colleges and Schools. Credits earned at Central Texas College are transferable to other institutions in accordance with policies of the receiving institution. 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.

# CREDIT TRANSFER LIMITS

#### MAXIMUM HOURS FOR TRANSFER TO OTHER COLLEGES

As a general rule, senior colleges will accept a maximum of sixty-six (66) semester hours of transfer credit from junior colleges. A student should not take more than this number of hours with the objective of transfer of credit unless written permission is secured from the chosen senior college.

# **HOW TO CHOOSE COURSES**

#### **COURSE NUMBERS**

The unit of credit for Central Texas College is the semester hour. Course numbers contain four digits. The first digit "1" reading from the left, indicates a freshman level course. If the first digit is a "2" it indicates a sophomore level course. The second digit indicates the semester hour value of the course. The third and fourth digits indicate the generally recommended sequence in which the courses are to be taken.

# WHAT TO DO ABOUT COURSE PREREQUISITES

#### **COURSES OUT OF SEQUENCE**

Students who, for scheduling reasons, find it desirable to take an advanced course prior to completing the prerequisite must secure approval from the Department Advisor prior to registering for the course. The final responsibility for taking advanced courses without completing the required prerequisites rests with the student.

## **HOW YOU RECEIVE GRADES**

#### GRADE 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:

- Grade Reports are mailed by the College to the student's address of record at the end of
  each term. This method of reporting grades permits students to judge their performance
  at the end of each term. Students are responsible for notifying the appropriate Central
  Texas College Records Office of change of address.
- Transcripts are provided by the Records Office and are the official report of completed courses, grades, and credit awarded by the College. For information on ordering transcripts, see page 26.

#### GRADES AND POINT AVERAGE

The grading system at Central Texas College is as follows:

Numerical Value Grades		Quality Points		
90-100	A-Superior	4		
80-89	B-Above Average	3		
70-79	C-Average	2		
60-69	D-Passing, but Unsatisfactory	1		
	F-Failure	0		
	I-Incomplete	0		
	N-No Credit			
	P-Completed			
	W-Withdrawal			

#### Grade Notes:

#### "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.

#### "F":

Failure may be awarded for lack of academic progress and/or failure to attend. "F" grades may not be removed 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 the student has completed the majority of the course work but, because of personal illness, death in the immediate family, or military orders, the student 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 absence 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 removed 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 remove the "I" within the period specified above.

#### "N"- NO CREDIT:

The grade of "N" is reserved for use with designated non-traditional, modular courses and will be awarded to students who have made satisfactory progress, but lack the 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 designated non-traditional, modular courses and will be awarded to students who have satisfactorily mastered all the modular 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.

#### "W" - WITHDRAWAL:

Students who officially withdraw will be awarded the grade of "W", provided the student's attendance and academic performance are satisfactory at the time of official withdrawal.

#### **GRADE POINT AVERAGING**

A student's grade point average is calculated by dividing the total quality points by the total attempted semester hours. Grades of "W", "N", and "P" are not included in these calculations.

#### GRADES AND FINANCIAL AID

The student attending college with Military Tuition Assistance, Tuition Aid, or VA Benefits should be familiar with the requirements and possible obligations incurred particularly upon receiving a grade of "F", "I", "W" or "N". For additional information, contact the Director of Student Financial Aid.

#### CHANGE OF GRADES

Students who feel that there has been a computational error in grading must immediately contact the instructor for 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 degree are not increased if a student repeats a course in which a passing grade has already been earned. In a repeated course, only the last grade earned is utilized in computing the gradepoint average.

# ACADEMIC STANDARDS

#### STUDENT RESPONSIBILITY

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. To aid the student, scholastic probation or suspension will be printed on the semester grade report. Students who receive grades below "C" (2.0) for any course should seek academic counseling to determine the causes of unsatisfactory work and receive recommendations for improving grades in subsequent classes.

### HONOR ROLL

Students whose scholastic achievement is notable are given recognition by publication of the "Dean's Honor Roll". The Honor Roll includes the names of all students who have earned a grade point average of 3.5 in 12 or more semester hours during the term.

## HONOR SOCIETIES

**Epsilon Delta Pi:** Students who have completed at least 15 semester hours, which includes at least 6 semester hours in computer science and who meet the scholastic requirements may apply for membership in Epsilon Delta Pi, a national Honor Society in the Computer Sciences. *Membership requirements are set* forth in detail in the Student Handbook.

Phi Theta Kappa: Students who carry a minimum of 15 semester hours and who meet the scholastic requirements of the local chapter may be eligible for membership in Phi Theta Kappa, National Honor Fraternity of American Junior Colleges.

# **GRADE REQUIREMENTS**

#### MINUMUM FOR SATISFACTORY PROGRESS

GRADUATION - requires an overall grade point average of 2.0 to include a minimum 2.0 at Central Texas College.

SATISFACTORY PROGRESS - Students at Central Texas College must achieve a 2.0 cumulative grade point average to maintain satisfactory progress toward graduation.

## IF YOU DON'T MAKE THE GRADE

PROBATION will be imposed after the first seven semester hours attempted when the student fails to maintain a 2.0 cumulative grade point average. Probation will be imposed during the next term in which the student registers. Students who do not maintain a "C" or 2.0 grade point average during the probation period will be suspended and cannot register for classes until completion of requirements for return to class, listed below.

Students who fail to maintain a 2.0 grade point average during their initial seven semester hours of courses will be required to participate in an academic counseling session prior to reenrollment.

SUSPENSION will be imposed for students who have attempted 8 or more semester hours and who previously failed to maintain a 2.0 cumulative grade point average, or if the student fails to achieve a 1.0 grade point average during the term. Suspended students may register for classes upon completion of requirements for return to class, listed below. NOTE: Students who use VA benefits and who are suspended will be reported to the Veterans Administration and must also meet VA requirements prior to reinstatement of VA benefits.

# HOW YOU MAY RETURN

#### RETURN TO CLASS AFTER SUSPENSION

Students attending Central Texas College who have been suspended will be permitted to reenter the college on an individual basis. Students wishing immediate re-entry must:

- 1. Complete a re-entry petition/probation agreement and
- 2. Receive counseling and
- 3. Complete specified courses as directed by a Guidance Counselor, or
- Complete a suspension period of one semster (term).

Students who have been suspended will be readmitted under PROBATION and must meet academic standards required while on probation.

## ARE CLASSROOM VISITS ALLOWED

#### VISITORS IN CLASS

Permission to visit a class may be granted by the Campus Dean. 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 care of their children during class meetings. College policy does not permit a student to audit courses.

# REGULATIONS GOVERNING STUDENT ACTIVITIES

## STUDENT RESPONSIBILITIES

#### ADDRESS CHANGE

Students attending Central Texas College must keep current permanent and local mailing addresses on file with the college. Address changes must be reported promptly to the Records Office. Students are responsible for all communication mailed to the last address on file.

#### 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 and/or expulsion from the College.

#### HAZING, DISRUPTIVE ACTIVITIES

Central Texas College enforces the Texas state laws prohibiting hazing, disruptive activities, or disruption of lawful assemblies on college property. Information regarding these prohibited activities appears in the official Student Handbook, available to regularly enrolled students at orientation sessions or in the office of the Director of Student Services.

#### SCHOLASTIC HONESTY

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

- Plagiarism The taking of passages from writings of others without giving proper credit to the sources.
- Collusion (a) using another's work as one's own, or (b) working together with another
  person in the preparation of work, unless such joint preparation is specifically approved in
  advance by the instructor.
- 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 are subject to disciplinary action.

## STUDENT DISCIPLINE

#### PHILOSOPHY

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 Governing Board of the institution.

In all orderly, democratic societies, citizens enjoy certain freedoms and privileges prescribed and protected by society for the benefit of all. Likewise, students at Central Texas College enjoy certain freedoms and privileges prescribed and protected for the maintenance of an

orderly environment conducive to the fulfillment of the objectives of the institution. Organized societies operate by laws, regulations, ethical and moral codes of conduct, and mutual respect for the role, authority, and responsibility of each segment within the society. The College campus exists for the purpose of providing a place where students may acquire the knowledge, understanding, judgment, and maturity necessary to function as well-adjusted members of society. A college which fails to provide this atmosphere for the learning experience which will enable its students to achieve these qualities has failed both the society which provides for its existence and the students who have sought its services.

Central Texas College is dedicated and committed to fulfilling its mission in society. All students who enroll are expected to understand, respect and support the role and purposes of the College. To teach students to become mature, capable, and productive members of society, the College has planned and organized every aspect of its operation to provide for an atmosphere conducive to the learning experience. This is true of student organizations, student social functions, extracurricular activities, and even the disciplinary procedures.

It is the desire and wish of the College Board members, administrators, and faculty that the necessity for disciplinary procedures could be eliminated. Unfortunately, as in all societies, there are some who refuse to accept and understand the necessity for orderly and organized procedures and for regulations designed to protect the interests and welfare of the institution itself, as well as the majority of its members.

For those few students who fail to understand and accept their role in an educational institution, the College has prescribed in the Student Handbook 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.

#### DUE PROCESS

Further information concerning due process procedures may be found in the current Central Texas College Student Handbook.

#### DISCIPLINARY ACTION

Disciplinary action may be written reprimand, disciplinary probation, suspension, or expulsion from the college.

Students on disciplinary probation may not receive honors from Central Texas College. The probation status is permanent unless the student has earned the privilege of being released from disciplinary probation.

#### SUMMONS TO ADMINISTRATIVE OFFICES

On some occasions it will be necessary for a faculty member, counselor or administrative official to contact an individual student. Any student receiving a summons from an administrative office must respond promptly as requested. A summons may take the form of a call from class, a notice on the official bulletin boards, or a notice by mail. Failure to respond to a summons renders the student subject to disciplinary action.

# **HOW TO OBTAIN TRANSCRIPTS**

### TRANSCRIPT ORDERING

A student's records are considered as confidential in nature. Convenient forms for ordering of 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 \$2.00 for all other transcripts must accompany the written request signed by the student.

Requests for transcripts should be addressed to the Records Office at the Central Campus address listed in the front of this catalogue. 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.

NOTE: Records of students attending branch campuses are maintained at branch campus offices until the branch campus Director of Student Services is informed by the student in writing that the student has moved. Academic records are then transferred to the Killeen, Texas offices.

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

#### 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/Refund at the Records Office or with a Central Texas College representative at the military Education Center. The withdrawal form must be signed by the student. In order for the withdrawal to be official it must be filed, by the student, in writing, with the Records Office. Applications for Withdrawal/Refund will not be accepted after the close of business on the last working day before the last week of class. (Also see Grade Notes: "W", page 23.

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 Financial Aid Office. Military Tuition Assistance students are referred to the Military Education Center.

Students who are administratively withdrawn from classes without officially withdrawing will receive an "F" grade and are ineligible for refunds.

Emergency withdrawal will be considered, when documentary evidence is presented. See Refunds, Page 8.

# CERTIFICATE & DEGREE REQUIREMENTS WHAT DEGREES ARE OFFERED

Central Texas College confers the Associate in Arts, the Associate in Science, the Associate in Applied Science, or the Associate in General Studies degree upon students who have completed all the general and specific requirements for graduation. Degrees are conferred three times each year, in December, May and August. It is the student's responsibility to make application for the degree. Each degree candidate must earn a minimum of 12 semester hours in traditional study at Central Texas College.

A person may normally 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. The additional 12 semester hours must be completed after the award date of the first degree. 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.

# WHAT REQUIREMENTS MUST BE MET FOR ASSOCIATE IN ARTS DEGREE

Complete a minimum of sixty-one semester hours which must include:

- 1. Twelve semester hours of English.
- 2. Six semester hours of U.S. History.
- 3. Six semester hours of State & Federal Government.
- Fourteen semester hours of foreign language or eight semester hours of foreign language and eight semester hours of science.
- 5. Four semester hours of physical education.

- 6. Psychology 1101.
- 7. A minimum of eighteen semester hours of sophomore courses.
- A minimum of twelve semester hours of credit earned anywhere within the Central Texas College system.
- 9. A minimum overall grade-point average of 2.0 ("C" average).
- 10. Meeting all other college requirements.

#### ASSOCIATE IN SCIENCE DEGREE

Complete a minimum of sixty-six semester hours which must include:

- 1. Twelve semester hours of English.
- 2. Six semester hours of U.S. History.
- 3. Six semester hours of State and Federal Government.
- 4. Four courses of science.
- 5. Six semester hours of math.
- 6. Four semester hours of physical education.
- 7. Psychology 1101.
- 8. A minimum of fifteen semester hours of sophomore courses.
- 9 A minimum of twelve semester hours credit earned anywhere within the Central Texas College system.
- A minimum overall grade-point average of 2.0 ("C" average).
- 11. Meeting all other college requirements.

#### ASSOCIATE IN GENERAL STUDIES DEGREE

Complete a minimum of sixty-one semester hours which must include:

- Three semester hours of written English and three semester hours of written or oral communications. (English language only).
- 2. Three semester hours of mathematics or science.
- 3. Three semester hours of U.S. History or U.S. Government.
- 4. Psychology 1101.
- 5. A minimum of 12 semester hours of sophomore courses.
- A minimum of 12 semester hours of credit earned anywhere within the Central Texas College system.
- 7. A minimum overall grade point of 2.0 ("C" average).
- 8. Meeting all other college requirements.

#### ASSOCIATE IN APPLIED SCIENCE DEGREE

The Associate in Applied Science Degree will be awarded to students who meet curricular requirements in specific vocational and clinical programs. The number of semester hour requirements varies according to the curriculum involved. A minimum overall grade-point average of 2.0 ("C") is required. A minimum of twelve semester hours must be completed in traditional study at Central Texas College.

#### CERTIFICATE OF COMPLETION

A Certificate of Completion will be awarded to students who fulfill the curricular requirements of special courses and programs. Minimum residency and G.P.A. as listed for degree programs is required.

#### TRANSFERABILITY OF COURSES

Students are urged to consult the catalogue of the institution to which he or she may transfer for the detailed information concerning coursework transfer. This catalogue should be used by the student as the basis for course planning. Courses taken in Developmental Studies may not satisfy degree requirements at transferring institutions.

#### **DEVELOPMENTAL STUDIES**

The Developmental Studies courses offered by the College are designed to provide means for students to remove specific deficiencies or provide refresher course work prior to attempting academic or occupational/technical programs.

Students on academic suspension may be required to complete Developmental Studies courses to satisfy readmission/probation requirements. DEVELOPMENTAL STUDIES COURSES MAY NOT BE USED TO SATISFY DEGREE REQUIREMENTS AT CENTRAL TEXAS COLLEGE. HOWEVER, DEVELOPMENTAL STUDIES COURSES ARE COMPUTED IN SEMESTER HOUR CREDIT, AND THE GRADE POINT AVERAGE EARNED WILL BE USED TO MEASURE SATISFACTORY PROGRESS.

## WHEN ARE CERTIFICATES & DEGREES AWARDED

Central Texas College awards Certificates and Degrees in December, May, and August of each year.

## HOW TO APPLY FOR CERTIFICATE/DEGREE

Request for Certificate/Degree, with appropriate fees, must be submitted to the Counseling Office:

For Certificate or Degree in December, by October 1st.

For Certificate or Degree in May, By February 1st.

For Certificate or Degree in August, by June 10th.

NOTE: All course requirements must be complete prior to Certificate/Degree award. Requests for certificate/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 from previously attended institutions must be on file in the Central Texas College Records Office by the above dates.

## WHEN IS COMMENCEMENT HELD

#### GRADUATION

Central Texas College holds one consolidated graduation exercise annually, at the end of the Spring Semester. Degrees and certificates will be awarded three times a year for students who are unable to attend the annual graduation exercise.

#### GRADUATION EXERCISES

All students applying for a degree or certificate, which is to be awarded at the end of the Spring Semester, are expected to measure for cap and gown and participate in practices for, and in, the actual graduation exercises. Students who do not participate in practice will not be permitted to participate in the graduation exercises.

In cases of extreme hardship, permission may be granted by the Director of Student Services to be excused from the graduation ceremony and practices. If the student feels that extreme hardship circumstances exist which will prevent attendance at graduation exercises, a written request to be excused from graduation must be submitted to the Director, Student Services. This must be done three weeks prior to the graduation exercise date, and the reasons for not participating in the graduation exercises must be stated. Students not participating in the graduation ceremony will not be recognized as graduating "in absentia." Excused graduates will be mailed their degree after graduation exercises have been completed.

## **HONORS**

#### **GRADUATION WITH HONORS**

Candidates for degrees from Central Texas College may graduate with HIGHEST HONORS or HONORS based upon the following criteria:

- To graduate with HONORS a candidate must have a 3.5 grade point average on a 4.0 scale
  with no grades below "B" on all course work taken. In computing the candidate's grade
  point average for HONORS, the grades in all courses taken at Central Texas College, as
  well as courses transferred from other accredited institutions of higher learning, are included.
- 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.
- Public recognition for graduation with honors or highest honors is conferred only when the student participates in the formal commencement ceremonies.
- 4. To qualify for honors consideration, students must have earned a minimum of 30 semester hours with Central Texas College.

## PROGRAMS OF STUDY

#### PROGRAM OFFERINGS

Curriculum plans for various degrees and/or certificates are listed alphabetically. Course descriptions for all courses offered are listed in numerical and alphabetical order. Many of the curricula presented on the following pages have been designed for students who wish to transfer to a senior college or university. The College counselors are available to assist the student in choosing from these suggested curricula or in working out special arrangements to meet particular educational plans.

ALTHOUGH ACADEMIC COUNSELING IS AVAILABLE, IT WILL REMAIN THE RESPONSIBILITY OF EACH STUDENT TO DETERMINE 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

Programs of study displayed in this catalogue 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.

Not all courses are available every semester due to the specialized nature of the course content, equipment requirement and/or facility availability. Students must consult the class schedule published each term for courses offered. The College reserves the right to cancel offered courses when insufficient or low enrollment or other circumstances require this action.

#### 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: ELTE 1302 - Technical Math II requires that ELTE 1301 - Technical Math I be successfully completed prior to registering for ELTE 1302.

Students who cannot schedule prerequisites must obtain prior approval to enroll in these courses from their Department Advisor or Counselor.

#### SEMESTER CREDIT HOURS

One semester hour of credit represents 1 hour of lecture class time or usually 2 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 3 semester hour course means there are 3 lecture hours per week for one 16-week semester and no lab hours required. (2-4) means there are 2 lecture hours and 4 lab hours per week for the same 16-week semester. This weekly requirement will be adjusted as necessary to compensate for courses with lengths other than 16 weeks.

#### 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.

# ACCOUNTING TECHNOLOGY

# A Two-Year Associate in Applied Science Degree

#### FIRST YEAR

First Se	mester	C	redit	Second	Semes	ter	Credit
ACCT	2303	Fundamentals of Accounting 1	3	ACCT	2304	Fundamentals of Accounting	11.3
BUSS	1301	Introduction to Business	3	ELCT*		Approved Elective	3
MATH	1307	Business Math	3	MGMT	1305	Introduction to Management	3
ENGL	1307	Business English	3	MGMT	1309	Income Tax	3
COSC	1300	Introduction to Computers or		SPCH	2303	Business and	
MISC	1450	Microcomputers for Business	3			Professional Speaking	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1			_	16
		=	17				

#### SECOND YEAR

First Semester		Credit	Second Semes	iter	Credit
ACCT 2309	Fundamentals of Accounting 1	III 3	ACCT 2310	Fundamentals of Accounting	IV 3
MGMT 2305	Business Law I	3	MGMT 2306	Business Law II	3
ACCT 2305	Basics of		ACCT**	Accounting Elective	3
	Managerial Accounting	3	ENGL 2309	Technical Writing	3
ACCT 2311	Accounting & Financial		ELCT*	Approved Elective	3
	Information Systems I	3			15
ELCT	Elective	3			
		15		TOTAL HOURS	63

<sup>\*</sup>Approved Electives: BUSS 2301, BUSS 2302, FIBA 2306, MGMT 1304, MGMT 1306, MGMT 1307, MGMT 2301, MGMT 2302, MATH 1308, OADM 1309 and OADM 2307.

# **ADMINISTRATIVE SECRETARIAL**

## A Two-Year Associate in Applied Science Degree

#### FIRST YEAR

First Sen	aester		Credit	Second Sen	nester	Credit
OADM	1301*	Beginning Shorthand	3	OADM 130	02* Intermediate Shorthand	3
OADM	1303*	Beginning Typewriting	3	OADM 130	04* Intermediate Typewritin	g 3
OADM	1305	Clerical Practice	3	OADM 130	06 Secretarial Practice	3
OADM	1309	Business Mathematics &		OADM 130	08 Business Correspon-	
		Calculating Machines	3		dence	3
ENGL	1307	Business English	3	OADM 130	07 Word Processing	3
PYED		Physical Education	1	PYED	Physical Education	1
PSYC	1101	College Orientation	1			
		~	17			16

First Semester		Credit	Second Semester			Credit
OADM 2301*	Advanced Shorthand	3	OADM	2303*	Advanced Word	
OADM 2302*	Advanced Typewriting	3			Processing/Transcription	3
OADM 2304	Bookkeeping l	3	OADM	2305	Bookkeeping II	3
ELCT	Computer Science Select	tion 3	OADM	2307	Office Administration &	
ELCT	Elective	3			Procedures	3
		15	SPCH		SPCH 1301 or 2303	3
			ELCT*		Approved Elective	3
						15
					TOTAL HOURS	63

<sup>\*</sup>Beginning or advanced levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests. Electives may be chosen by students who receive advanced standing in shorthand and typing. Courses may be chosen leading toward general, medical, or legal secretarial programs upon department approval.

<sup>\*\*</sup>Accounting Electives: ACCT 2306 and ACCT 2312

## **AGRICULTURE**

# A Two-Year Associate in General Studies Degree

#### FIRST YEAR

First Se	First Semester		Credit	Second Semester			Credit
AGRI	1301	Animal Husbandry	3	ELCT*		Approved Agriculture	
BIOL	1401	General Biology I	4			Elective	3
<b>ENGL</b>	1301	Composition & Rhe-		ELCT*		Approved Agriculture	
		toric I	3			Elective	3
HIST	1301	History of the U.S.		BIOL	1402	General Biology II	4
		to 1877	3	ENGL	1302	Composition & Rhe-	
MATH	1301	Intermediate Algebra	3			toric II	3
PYED		Physical Education	1	HIST	1302	History of the U.S. from 1877	7 3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
			18				17

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
AGRI	2301	Entomology	3	ELCT*		Approved Agriculture	
CHEM	1401	General Chemistry I	4			Elective	3
GOVT	2301	State & Federal Gov-		CHEM	1402	General Chemistry II	4
		ernment I	3	GOVT	2302	State & Federal Gov-	
ENGL	2301	English Literature I	3			ernment II	3
ELCT*		Approved Elective	3	ENGL	2302	English Literature II	3
PYED		Physical Education	1	ELCT*		Approved Elective	3
			17	PYED		Physical Education	1
							17
						TOTAL HOURS	69

<sup>\*</sup>Electives must be approved by the Department Manager. Student should check requirements of the institution to which they intend to transfer.

# AIR CONDITIONING & REFRIGERATION

## A Two-Year Associate in Applied Science Degree

#### FIRST YEAR

First Semester		Credit	Second	ter	Credit		
AIRC	1400	Air Conditioning &		AIRC	1402	Household Refrigeration	4
		Refrigeration, The-		AIRC	1403	Heating Systems	4
		ory & Application	4	AIRC	1405	Test Instruments	4
AIRC	1401	Basic Electrical Cir-		TMTH	1300	Technical Mathematics I	3
		cuits	4	PYED		Physical Education	1
WELD	1401	Beginning Gas Weld-					16
		ing	4			•	
ENGL	1309	Communications Skills	3				
PSYC	1101	College Orientation	1				
PYED		Physical Education	1				
			17				

#### SECOND YEAR

First Semester			Credit	Second Semester			Credit
AIRC	1404	Residential Air Con-		AIRC	2403	Commercial Air Con-	
		ditioning	4			ditioning Systems	4
AIRC	2401	Control Theory and		AUTO	1405	Automotive Air Con-	
		Application	4			ditioning	4
AIRC	2402	Commercial Refriger-		BUSS	1301	Introduction to Busi-	
		ation Systems	4			ness	3
DRDS	1400	Fundamentals of		ELCT*		Approved Elective	4
		Drafting	4	ELCT		Elective	3
			16				18
						TOTAL HOURS	67

<sup>\*</sup>WELD 1402, MGMT 1306, MTNT 1401, MTNT 2403, DRDS 1303 or other elective approved by the Department Manager.

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# AIR CONDITIONING & REFRIGERATION SOLAR ENERGY OPTION

# A Two-Year Associate in Applied Science Degree

## FIRST YEAR

First Semester		Credit	Second Semester			Credit	
AIRC	1400	Air Conditioning &		AIRC	1403	Heating Systems	4
		Refrigeration, The-		AIRC	1405	Test Instruments	4
		ory & Application	4	SESY	1401	Solar Heating and	
AIRC	1401	Basic Electrical Cir-				Cooling Systems	4
		cuits	4	TMTH	1300	Technical Mathematics I	3
ENGL	1309	Communications Skills	3	PYED		Physical Education	1
WELD	1401	Beginning Gas Welding	4				16
PSYC	1101	College Orientation	1				
PYED		Physical Education	1				
			17				

## **SECOND YEAR**

First Semester		Credit	Second Semester			Credit
AIRC 1404	Residential Air Con-		SESY	2402	Solar Energy Special	
	ditioning	4			Projects	4
AIRC 2401	Control Theory and		MTNT	1401	Carpentry I	4
•	Application	4	BUSS	1301	Introduction to Busi-	
SESY 2401	Solar Systems Design	4			ness	3
DRDS 1400	Fundamentals of		ELCT*		Approved Elective	4
	Drafting	4	ELCT		Elective	3
		16				18
					TOTAL HOURS	67

<sup>\*</sup>Approved Electives: AIRC 2402, AIRC 2403, DRDS 1303, MTNT 2403, WELD 1402.

# **ANIMAL PRODUCTION**

# A One-Year Certificate of Completion

First Semester			Credit	Second Semester			Credit
FRMG	2307	Livestock Production	3	FRMG	1302	Range Management	3
FRMG	1304	Animal Health	3	AGRI	1303	Poultry Science	3
FRMG	2303	Feeds & Feeding	3	FRMG	2306	Livestock Marketing	3
AGRI	1301	Animal Husbandry	3	FRMG	2401	Food Preservation	4
AGRI	2301	Entomology	3				13
PSYC	1101	College Orientation	1				
, 0 , 0			16				
						TOTAL HOURS	29

# APPLIED MANAGEMENT

# A Two-Year Associate in Applied Science Degree

#### FIRST YEAR

First Semester	Credit	Second Semester			Credit	
BUSS 1302	Consumer Economics	3	BUSS	2306	Personal Finance	3
*	COSC/MGMT		MATH	1307	Business Math	3
	Selection(s)	3	*		ENGL/Communications	
MGMT 1305	Introduction to Man-				Selection(s)	3
monti 1905	agement	3	*		SPCH Selection(s)	3
MGMT 1306	Human Relations	3	**		MGMT Selection(s)	3
*	ENGL/Communications		PYED		Physical Education	1
	Selection(s)	3				16
PYED	Physical Education	1				
PSYC 1101	College Orientation	1				
.0.0		17				

# APPLIED MANAGEMENT (cont'd)

#### SECOND YEAR

First Semester		Credit	Second	Semes	ter	Credit
ACCO 2303	Principles of Accounting	I 3	HIST	2301	International Relations &	
ACCO 2103	Accounting I Lab	1			U.S. Foreign Policy	3
MGMT 2302	Personnel Management	3	MGMT	2303	Law & Legal Assistance	3
MGMT 2309	Supervision	3	MGMT	2310	Personnel Counseling	3
*	SPCH Selection(s)	3	**		MGMT Selection(s)	3
**	MGMT Selection(s)	3	ELCT		Elective	3
PYED	Physical Education	1	PYED		Physical Education	1
		17				16
					TOTAL HOURS	66

Selected courses approved by the Department Chairman or authorized Central Texas College personnel according to the student need.

COSC 1300, COSC 1307, COSC 1403, COSC 1405

SPCH 1301, SPCH 2303.

\*\*BUSS 1301, BUSS 2306, MGMT 1151, MGMT 1152, MGMT 1153, MGMT 1154, MGMT 1201, MGMT 1202, MGMT 1203, MGMT 1204, MGMT 1205, MGMT 1206, MGMT 1207, MGMT 1208, MGMT 1209, MGMT 1301, MGMT 1302, MGMT 1303, MGMT 1304, MGMT 1307, MGMT 1309, MGMT 2151, MGMT 2152, MGMT 2201, MGMT 2202, MGMT 2203, MGMT 2204, MGMT 2205, MGMT 2206, MGMT 2301, MGMT 2304, MGMT 2305, MGMT 2306, MGMT 2311, MGMT 2312, MGMT 2350, MGMT 2351, MGMT 2352, MGMT 2353, MGMT 2354, MGMT 2160, MGMT 2161, MGMT 2162, OADM 1308, OADM 2307, PSYC 2301, REAE 1301, REAE 2304, REAE 2305, SOCI 2308, MGMT 1155, MGMT 1156, MGMT 1157, MGMT 1158, MGMT 1159, MGMT 1160, MGMT 2251, MGMT 2252, MGMT 2253 and MGMT 2254.

# APPLIED MANAGEMENT WITH TECHNICAL OPTIONS

# A Two-Year Associate in Applied Science Degree OPTION I. AUTOMOTIVE TUNE—UP FIRST YEAR

First Semester		Credit	Second	Semes	ter	Credit
MGMT 1302	Safety (OSHA)	3	MGMT	1304	Work Organization	3
MGMT 1305	Introduction to Managemen	t 3	MGMT	1306	Human Relations	3
AUTO 1401	Internal Combustion		AUTO	1404	Fuel Systems	4
	Engine Fundamentals	4	AUTO	2406	Engine Diagnosis &	
AUTO 1402	Automotive Electrical				Emission Control	4
	Systems	4	MATH	1307	Business Mathematics	3
BUSS 1301	Introduction to Business	3	PYED		Physical Education	1
PYED	Physical Education	1				18
PSYC 1101	College Orientation	1				
		10				

First Semester		Credit	Second Semester			Credit
MGMT 2309 S	Supervision	3	MGMT	1309	Income Tax	3
ENGL 1309 (	Communication Skills	3	MGMT	2305	Business Law I	3
OADM 2304 I	Bookkeeping I	3	AUTO	2402	Shop Organization &	
SPCH 2303 H	Business and Profession	al			Management	4
5	Speaking	3	OADM	2305	Bookkeeping II	3
ELCT*	Approved Elective	3-4	ELCT		Elective	3-4
PYED I	Physical Education	1	PYED		Physical Education	1
		16-17				17-18
					TOTAL HOURS	70-72

<sup>\*</sup>Approved Electives: BUSS 2301, BUSS 2302, BUSS 2306, ELTE 1301, MATH 1300, MGMT 2300, MGMT 2301, MGMT 2306, MTNT 1401, MTNT 2403, OADM 1303, OADM 1304, OADM 1308, OADM 1309, TMTH 1300.

<sup>\*</sup>ENGL 1301, ENGL 1307, ENGL 1309, ENGL 2309, ENGL 2350

# OPTION 2. ELECTRONICS SERVICING FIRST YEAR

First Semester		Credit	Second	Semes	ter	Credit
MGMT 1302	Safety (OSHA)	3	MGMT	1304	Work Organization	3
MGMT 1305	Introduction to Management	t 3	MGMT	1306	Human Relations	3
BUSS 1301	Introduction to Business	3	ELTE	1403	Electronics Circuits I	4
PYED	Physical Education	1	ELTE	1503	Advanced Electricity	•
ELTE 1501	Basic Electricity				for Electronics	5
	for Electronics	5	ENGL	1309	Communications Skills	3
CMET 1401	Digital Circuits	4	PYED		Physical Education	1
PSYC 1101	College Orientation	1				19
	-	20				-3

### SECOND YEAR

First Semest	ėr	Credit	Second	Semes	ter	Credit
MGMT 230	9 Supervision	3	MGMT	1309	Income Tax	3
ELTE 140	Communications Circuits	I 4	MGMT	2305	Business Law I	3
CMET 140	CRT Systems	4	OADM	2305	Bookkeeping II	3
OADM 230	Bookkeeping I	3	ELCT		Elective	3
SPCH 230	Business and Professional	l	PYED		Physical Education	1
	Speaking	3	ELTE	2407	Communications Circuit	s II 4
PYED	Physical Education	1				17
	-	18			TOTAL HOURS	74

<sup>\*</sup>Approved Electives: BUSS 2301, BUSS 2302, BUS 2306, ELTE 1301, MATH 1300, MGMT 2300, MGMT 2301, MGMT 2306, MTNT 1401, MTNT 2403, OADM 1303, OADM 1304 OADM 1308, OADM 1309, TMTH 1300.

# OPTION 3. FOOD SERVICE OPERATIONS FIRST YEAR

First Semester		Credit	Second Se	emest	er	Credit
MGMT 1302	Safety (OSHA)	3	MGMT 1	304	Work Organization	3
MGMT 1305	Introduction to Managemen	t 3	MGMT 1	306	Human Relations	3
HMMG 1300	Food & Beverage Man-		FSMG 1	302	Nutrition	3
	agement	3	FSMG 1	303	Sanitation & Safety	3
FSMG 1401	Food Preparation &		MATH 1	307	Business Mathematics	3
	Serving	4	PYED		Physical Education	1
BUSS 1301	Introduction to Business	3				16
PYED	Physical Education	1				
PSYC 1101	College Orientation	1				
	· ·	18				

First Semester		Credit	Second Semest	ег	Credit
MGMT 2309	Supervision	3	MGMT 1309	Income Tax	3
FSMG 1305	Food Purchasing	3	MGMT 2305	Business Law I	3
ENGL 1309	Communication Skills	3	FSMG 1306	Menu Planning	3
OADM 2304	Bookkeeping I	3	OADM 2305	Bookkeeping II	3
SPCH 2303	Business and Professional	l	ELCT	Elective	3-4
	Speaking	3	PYED	Physical Education	1
PYED	Physical Education	1			16-17
	•	16		TOTAL HOURS	66-67

<sup>\*</sup>Approved Electives: BUSS 2301, BUSS 2302, BUSS 2306, ELTE 1301, MATH 1300, MGMT 2300, MGMT 2301, MGMT 2308, MTNT 1401, MTNT 2403, OADM 1303, OADM 1304, OADM 1308, OADM 1309, TMTH 1300.

# OPTION 4. COMPUTER SCIENCE FIRST YEAR

First Semester		Credit	Second	Semes	ter	Credit
MGMT 1305	Introduction to Management	1 3	MGMT	1304	Work Organization	3
COSC 1405	Introduction to Systems		MGMT	1301	Organization and	
	Analysis	4			Management	3
COSC 1403	Introduction to Computer	,	COSC**	*	Computer Science Elective	e 3
	Science and Computer		COSC	1406	Computer Organization as	nd
	Programming	4			Architecture	4
MATH*	Mathematics Option	3	SPCH	1301	Public Speaking	3
ENGL 1309	Communications Skills	3	PYED		Physical Education	1
PYED	Physical Education	1				17
PSYC 1101	College Orientation	1				
		19				

#### **SECOND YEAR**

First Sem	ester		Credit	Second	Semest	er	Credit
MGMT 2	2303	Law & Legal Assistance	3	MGMT	2312	Fundamentals of Systems	3
MGMT 2	2302	Personnel Management	3			Management	3
ACCO 2	2303	Principles of Accounting	1 3	COSC	1408	Conversational Language	s -
ACCO 2	2103	Accounting I Lab	1			Basic	4
COSC 1	404**	COBOL Programming	4	ACCO	2304	Principles of Accounting	II 3
COSC 2	2301	Introduction to Computer	•	ACCO	2104	Accounting II Lab	1
		Center Management	3	ELCT		Elective	3
				ELCT***		Approved Elective	3-4
			17			1	8-19
						TOTAL HOURS 7	1-72

<sup>\*</sup>MATH 1301, 1307, or 1308.

# OPTION 5. HOME ENTERTAINMENT SERVICING FIRST YEAR

First Semester		Credit	Second Semester			Credit	
MGMT	1305	Introduction to Man-		MGMT	1304	Work Organization	3
		agement	3	MGMT	1306	Human Relations	3
MGMT	1302	Safety (OSHA)	3	ELTE	1503	Advanced Electricity	
ELTE	1501	Basic Electricity				for Electronics	5
		for Electronics	5	ELTE	1403	Electronics Circuits I	4
CMET	1401	Digital Circuits	4	ENGL	1309	Communications Skills	3
BUSS	1301	Introduction to Business	3	PYED		Physical Education	1
PYED		Physical Education	1				19
PSYC	1101	College Orientation	1				
			20				

First Semester	rst Semester Credit Second Semester		ster	Credit	
MGMT 2309	Supervision	3	MGMT 1309	Income Tax	3
CMET 1409	CRT Systems	4	MGMT 2305	Business Law I	3
COES 2408	CATV & Audio Systems	4	COES 2409	Advanced Television	
OADM 2304	Bookkeeping I	3		Servicing	4
SPCH 2303	Business and Professiona	ıl	OADM 2305	Bookkeeping II	3
	Speaking	3	ELCT	Elective	3-4
PYED	Physical Education	1	PYED	Physical Education	1
		18			17-18
				TOTAL HOURS	74-75

<sup>\*</sup>Approved Electives: BUSS 2301, BUSS 2302, BUSS 2306, ELTE 1301, MATH 1300, MGMT 2300, MGMT 2301, MGMT 2306, MTNT 1401, MTNT 2403, OADM 1303, OADM 1304, OADM 1308, OADM 1309, TMTH 1000.

<sup>\*\*</sup>COSC 2401 may be substituted if required.

<sup>\*\*\*</sup>Approved Electives: COSC 1304, COSC 1401, MGMT 1306, MGMT 1307, MGMT 1309, MGMT 2301, MGMT 2305, MGMT 2309, BUSS 1302, OADM 2304, OADM 2305, COSC 2401, COSC 2402, COSC 2405.

# OPTION 6. RESIDENTIAL AIR CONDITIONING SERVICING

### FIRST YEAR

First Semester		Credit	Second	Semest	er	Credit
MGMT 1302 Saf	ety (OSHA)	3	MGMT	1304	Work Organization	3
MGMT 1305 Intr	oduction to Man-		MGMT	1306	Human Relations	3
age	ment	3	AIRC	1402	Household Refrigeration	·
AlRC 1400 Air	Conditioning &				Systems	4
Ref	rigeration Theory		AIRC	1403	Heating Systems	4
& A	pplication	4	MATH	1307	Business Mathematics	3
AIRC 1401 Bas	ic Electrical Circuits	4	PYED		Physical Education	1
BUSS 1301 Into	roduction to Business	3			·	18
PYED Phy	sical Education	1				
PSYC 1101 Col	lege Orientation	1				
		19				

#### SECOND YEAR

First Semester		Credit	Second Semes	Credit	
MGMT 2309	Supervision	3	MGMT 1309	Income Tax	3
ENGL 1309	Communications Skills	3	MGMT 2305	Business Law I	3
OADM 2304	Bookkeeping l	3	AIRC 1404	Residential Air Condi-	
SPCH 2303	Business and Profession	al		tioning	4
	Speaking	3	OADM 2305	Bookkeeping II	3
ELCT*	Approved Elective	3-4	ELCT	Elective	3-4
PYED	Physical Education	1	PYED	Physical Education	1
	-	16-17			17-18
				TOTAL HOURS	70-72

<sup>\*</sup>Approved Electives: BUSS 2301, BUSS 2302, BUSS 2306, ELTE 1301, MATH 1300, MGMT 2300. MGMT 2301, MGMT 2306, MTNT 1401, MTNT 2403, OADM 1304, OADM 1308, OADM 1303, OADM 1309, TMTH 1300.

## OPTION 7. SMALL ENGINE SERVICING FIRST YEAR

First Semester		Credit	Second Sem	Credit	
MGMT 1302	Safety (OSHA)	3	MGMT 130	4 Work Organization	3
MGMT 1305	Introduction to Managemen	t 3	MGMT 130	6 Human Relations	3
SGER 1401	Gas Engine Fundamental	s 4	SGER 140	7 Small Gas Engine Service	4
SGER 1400	Shop Practice & Safety	4	SGER 140	8 Chain Saw Service	
BUSS 1301	Introduction to Business	3		& Repair	4
PYED	Physical Education	1	MATH 130	7 Business Mathematics	3
PSYC 1101	College Orientation	1	PYED	Physical Education	1
1010 1111		19		-	18

First Semester		Credit	Second Seme	Credit	
MGMT 2309	Supervision	3	MGMT 1309	Income Tax	3
SGER 1409	Motorcycle Service	4	MGMT 2305	Business Law I	3
ENGL 1309	Communications Skills	3	SGER 2311	Shop Organization &	
OADM 2304	Bookkeeping I	3		Management	3
SPCH 2303	Business and Profession	al	OADM 2305	Bookkeeping II	3
0, 0,,	Speaking	3	ELCT	Elective	4
PYED	Physical Education	1		Physical Education	1
1 100	,0.10.11 2	17		-	17
				TOTAL HOURS	71

<sup>\*</sup>Approved Electives: BUSS 2301, BUSS 2302, BUSS 2306, ELTE 1301, MATH 1300, MGMT 2300, MGMT 2301, MGMT 2306, MTNT 1401, MTNT 2403, OADM 1303, OADM 1304, OADM 1308, OADM 1309, TMTH 1300 SGER 2407, SGER 2408, SGER 2409, SGER 2410. MTNT 2402.

### ART

# A Two-Year Associate in Arts Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
<b>ENGL</b>	1301	Composition & Rhe-		ENGL	1302	Composition & Rhe-	
		toric I	3			toric II	3
HIST	1301	History of the U.S.		HIST	1302	History of the U.S.	
		to 1877	3			from 1877	3
LANG		Beginning French, Ger-		LANG		Beginning French, Ger-	
		man, or Spanish I	4			man or Spanish II	4
ART.*		(Two courses)	6	ART.*		(Two courses)	6
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				17
		_	18				

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
ENGL	2301	English Literature I	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
ART.*		(Two courses)	6	ART.*		(Two courses)	6
LANG		Intermediate Language	or o	LANG		Intermediate Language	or
		Science	3-4			Science	3-4
PYED		Physical Education	1	PYED		Physical Education	1
		•	16-17				16-17
						TOTAL HOURS	67-69

<sup>\*</sup>Students should check the catalogue of the institution to which they plan to transfer for particular art courses.

# **AUTOMOTIVE BODY REPAIR**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester Credit Second Semester		Credit					
ATBR	1401	Shop Practices	4	ATBR	1404	Frame Repair Alignment	4
ATBR	1402	Body and Frame Con-		ATBR	1406	Body Panel Repair	
		struction	4			& Finishing	4
ATBR	1403	Roughing & Alignment	4	AUTO	2405	Steering & Suspension	
ATBR	1405	Auto Body Welding	4			Systems	4
PYED		Physical Education	1	TMTH	1300	Technical Mathematics I	3
PSYC	1101	College Orientation	1	ENGL	1309	Communications Skills	3
		J	18				18

First Semester		Credit	Second Semester			Credit
ATBR 2	400 Major Vehicle Dan	паде	ATBR	2402	Glass, Electrical &	
	Repair	4			Power Accessory Serv.	4
ELCT	Elective	3-4	ATBR	2405	Management & Esti-	
ATBR 2	403 Painting & Refinis	hing 4			mating	4
AUTO 1	402 Automotive Electri	ical	ELCT		Elective	3-4
	Systems	4	MATH	1307	Business Math	3
PYED	Physical Education	n 1				14-15
		16-17			TOTAL HOURS	66-68

<sup>\*</sup>Suggested Electives: AUTO 1405, AUTO 1407, AUTO 2401, WELD 1402, WELD 1404, MGMT 1305, BUSS 1301.

If German is taken the first year, Beginning French or Spanish may be taken the second year.

# **AUTOMOTIVE SERVICE & REPAIR**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
AUTO	1400	Shop Practices & Safety	4	AUTO	1403	Internal Combustion	
AUTO	1401	Internal Combustion				Engine Service	4
		Engine Fundamentals	4	AUTO	1404	Fuel Systems	4
AUTO	1402	Automotive Electrical		AUTO	1407	Brake Systems	4
		System	4	*		Communications/ENGL	
TMTH	1300	Technical Mathematics I	3			Selection(s)	3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
DAKD		Physical Education	1			-	16

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit
AUTO 2401	Standard Transmission 8	k	AUTO	1405	Automotive Air Con-	
	Differentials	4			ditioning	4
AUTO 2404	Ignition, Starting, &		AUTO	2403	Automatic Transmis-	
	Charging Systems	4			sions	4
AUTO 2405	Steering & Suspension		AUTO	2406	Engine Diagnosis &	
	Systems	4			Emission Control	4
•	AUTO/MGMT/WELD		*		AUTO/MGMT/WELD	
	Selection(s)	4			Selection(s)	4
			ELCT		Elective	3
		16				19
					TOTAL HOURS	68

Selected course approved by the Department Chairman or authorized Central Texas College personnel according to the student need.

\*ENGL 1301, ENGL 1307, ENGL 1309, ENGL 2309, ENGL 2350, SPCH 1301, SPCH 2303, MGMT 1302, MGMT 1304, MGMT 1305, MGMT 2161, MGMT 2162, MGMT 2250, MGMT 2251, MGMT 2254, MGMT 2302, MGMT 2352, MGMT 2309, AUTO 1150, AUTO 1151, AUTO 1152, AUTO 1153, AUTO 1257, AUTO 1250, AUTO 1251, AUTO 1252, AUTO 1253, AUTO 1253, AUTO 1254, AUTO 1255, AUTO 2350, AUTO 2350, AUTO 2402, AUTO 2407, DIEM 1150, DIEM 1250, DIEM 1401, DIEM 1403, WELD 1250, WELD 1251, WELD 1401, and WELD 1402.

# **AVIATION MAINTENANCE TECHNOLOGY**

# Two-Year Associate in Applied Science Degree

First Semester	(	Credit	Second	Semes	ter	Credit
AVMT 1301	Maintenance Publications-C	3	AVMT	1303	Aircraft Drafting-G	3
AVMT 1302	Weight & Balance-G	3	AVMT	1304	Airframe Materials &	
AVMT 1305	Basic Aircraft Electricity-G	3			Corrosion Control-G	3
ENGL 1309	Communications Skills	3	AVMT	1306	Aircraft Finishes-A	3
PHYS 1403	Survey of Physics	4	AVMT	1402	Sheet Metal Structures-A	4
PSYC 1101	College Orientation	1	ELCT		Elective	3
PYED	Physical Education	1	PYED		Physical Education	1
1 1 1 1 1	- <b></b>	18				17
Summer Seme	ster					
Subject						
AVMT 2303	Airframe Inspection-A	3				
AVMT 2304	Aircraft Fuel Systems-A	3				
AVMT 2402	Hydraulics & Pneumatics-A	4				
	•	10				

# AVIATION MAINTENANCE TECHNOLOGY (cont'd)

### SECOND YEAR

First Semester			Credit	Second Semester			Credit
AVMT	2305	Aircraft Instruments Sys	-	AVMT	2404	Powerplant Maintenance	
		tems-A	3			Reciprocating Engines-P	4
AVMT	2306	Engine Electrical Systems-P	3	AVMT	2307	Engine Lubrication &	
AVMT	2403	Aircraft Electricial Sys-				Cooling Systems-P	3
		tems-A	4	AVMT	2406	Aircraft Propellers-P	4
AVMT	2405	Engine Fuel Systems-P	4	AVMT	2407	Powerplant Maintenance	
		- '	14			Turbine Engines-P	4
							15
						TOTAL HOURS	74

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

## **BIOLOGY**

# A Two-Year Associate in Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
BIOL	1401	General Biology I	4	BIOL	1402	General Biology II	4
CHEM	1401	General Chemistry I	4	CHEM	1402	General Chemistry II	4
HIST	1301	History of the U. S. to		HIST	1302	History of the U. S.	
		1877	3			from 1877	3
<b>ENGL</b>	1301	Composition & Rhe-		<b>ENGL</b>	1302	Composition & Rhe-	
		toric I	3			toric II	3
MATH	1303	Trigonometry	3	MATH	1304	Analytic Geometry	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1			·	18
		-	19				

### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
BIOL	2401	Invertebrate Zoology	4	BIOL	2402	Vertebrate Zoology	4
GEOL	1401	Physical Geology	4	GEOL	1402	Historical Geology	4
GOVT	2301	State & Federal Govern-		GOVT	2302	State & Federal Govern-	
		ment I	3			ment II	3
<b>ENGL</b>	2301	English Literature I	3	ENGL	2302	English Literature II	3
PYED		Physical Education	1	PYED		Physical Education	1
			15				15
						TOTAL HOURS	67

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

## **BUSINESS ADMINISTRATION**

## A Two-Year Associate in Arts Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
SCIE		Biology Chemistry, Phy-		SCIE		Biology, Chemistry, Phy-	
		sics or Geology	4			sics or Geology	4
BUSS	2301	Principles of Economics I	3	BUSS	2302	Principles of Economics II	3
ENGL	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric II	3
MATH	1305*	Finite Mathematics I	3	MATH	1306*	Finite Mathematics II	3
PSYC	2301	Introduction to Psychology	у 3	BUSS	1301	Introduction to Business	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				17
		_	18				

#### SECOND YEAR

		—					
First Se	mester	C	redit	Second Semester			Credit
HIST	1301	History of the U.S. to 1877	3	ACCO	2304	Principles of Accounting	II 3
ACCO	2303	Principles of Accounting I	3	ACCO	2104	Accounting I Lab	1
ACCO	2103	Accounting I Lab	1	ENGL	2302	English Literature II	3
<b>ENGL</b>	2301	English Literature l	3	GOVT	2302	State & Federal Gov-	
GOVT	2301	State & Federal Govern-				ernment II	3
		ment I	3	HIST	1302	History of the U.S.	
ELCT		Approved Elective	3			from 1877	3
PYED		Physical Education	1	SPCH		1301 or 2303	3
		-	17	PYED		Physical Education	1
						, -, <b>,</b>	17
						TOTAL HOURS	69

<sup>\*</sup>Math 2301 (Calculus I) and Math 2302 (Calculus II) may be substituted for Math 1305 and Math 1306 if the student is going to enter such degree programs as actuarial science, business statistics, industrial management, or engineering as a route to the Bachelor of Business Administration degree.

# **BUSINESS MANAGEMENT**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Seme	iter	Credit	
MGMT 1304	Work Organization	3	MGMT 2302	Personnel Management	3	
MGMT 1305	Introduction to Management	3	MGMT 2309	Supervision	3	
MGMT 1306	Human Relations	3	ELCT*	Approved BUSS/MGMT/		
BUSS 1301	Introduction to Business	3		OADM elective	3	
ENGL**	English Elective	3	OADM 1309'	Business Mathematics &		
PYED	Physical Education	1		Calculating Machines	3	
PSYC 1101	College Orientation	1	SPCH	SPCH 1301 or 2303	3	
		17	PYED	Physical Education	1	
					16	

<sup>\*\*</sup>BBA majors take two courses in accounting instead of two courses in foreign language to meet Central Texas College requirements for the Associate in Arts degree.

# BUSINESS MANAGEMENT (cont'd)

## SECOND YEAR

First Ser	First Semester		Credit	Second	ter	Credit	
	2303	Accounting I and		ACCO	2304	Accounting II and	
_	2103	Accounting I Lab or		ACCO	2104	Accounting II Lab or	
OADM	2304	Bookkeeping I	4	OADM	2305	Bookkeeping II	4
MGMT	2301	Marketing Principles	3	BUSS	2302	Principles of Economics I	I 3
BUSS	2301	Principles of Economics I	3	ELCT*		Approved BUSS/MGMT/	
ELCT*		Approved BUSS/MGMT/	•			OADM elective	3
		OADM elective	3	OADM	2307	Office Administration &	
MISC	1450	Microcomputers for				Procedures	3
		Business	4	ELCT		Elective	3
			17				16
						TOTAL HOURS	66

<sup>\*</sup>Approved BUSS/MGMT/OADM electives must be approved by the Department Manager.

Mathematics elective may be substituted for OADM 1309 with approval of the Department Manager.

\*\*ENGL 1301, ENGL 1307

# **CABINETRY AND MILLWORK**

## A One-Year Certificate of Completion

First Semester			Credit	Second Semester			
MTNT	1400	Shop Practice and Safety	4	MTNT	2402	Carpentry II	4
MTNT	1401	Carpentry I	4	MTNT	2408	Mill Cabinetry Construction	
TMTH	1300	Technical Math I	3			and Installation	4
DRDS	1303	Architectural Blueprint		MTNT	2409	Milling Machines	4
		Reading	3				12
		_	14				
						TOTAL HOURS	26

# **CAREER PILOT**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
CAPI	1301	Aircraft Science	3	CAPI	1302	Propulsion Systems	3
CAPI	1303	Air Navigation	3	CAPI	1304	Intermediate Flight	3
CAPI	1300	Basic Flight	3	CAPI	1306	Meteorology	3
ENGL*		Appv'd Communication		CAPI	1305	Advanced Air Navigation	3
		Elective	3	ENGL*		Appv'd Communications	
MATH		Approved Mathematics				Elective	3
		Elective	3	PYED		Physical Education	1
PYED		Physical Education	1				16
PSYC	1101	College Orientation	1				
			17				

# CAREER PILOT (cont'd)

### SECOND YEAR

First Semester			Credit	Second Semester	Credit
CAPI	2301	Aerodynamics	3	CAPI 2303 Air Transportation	3
CAPI	2304**	*Advanced Flight	3	CAPI 2307 Aviation Radio Sys	tems 3
CAPI	2300	Commercial Aviation	3	CAPI 2305*** Commercial Flight	3
ELCT**	•	Approved Elective	3	ELCT** Approved Elective	3
PHYS	1403	Survey of Physics	4	ELCT** Approved Elective	3
			16		15
				TOTAL HOUR	S 64

<sup>\*</sup>Approved Communication Electives: Students in a four-year program should take ENGL 1301 the first semester and ENGL 1302 the second semester. Students in the Associate Degree Program may take ENGL 1301, ENGL 1309, ENGL 2309, ENGL 1302 (if qualified), or SPCH 1301.

# CARPENTRY

## A One-Year Certificate of Completion

First Semester		Credit	Second	Credit			
MTNT	1400	Shop Practice and Safety	4	MTNT	2402	Carpentry II	4
TMTH	1300	Technical Math I	3	MTNT	2405	Foundations, Framing,	
DRDS	1303	Architectural Blueprint				and Roofing	4
		Reading	3	MTNT	2406	Building Materials	
MTNT	1401	Carpentry I	4			and Estimating	4
			14	MTNT	2407	Interior-Exterior	
						Finishing	4
							16
						TOTAL HOURS	30

# CHEMISTRY

# A Two-Year Associate in Science Degree FIRST YEAR

First Se	First Semester		Credit	Credit Second Semester			
CHEM	1401	General Chemistry I	4	CHEM	1402	General Chemistry II	4
MATH	1303*	Trigonometry	3	MATH	1304	Analytic Geometry	3
HIST	1301	History of the U.S.		HIST	1302	History of the U.S.	
		to 1877	3			from 1877	3
<b>ENGL</b>	1301	Composition & Rhetoric !	3	ENGL	1302	Composition & Rhetoric II	3
PYED		Physical Education	1	PSYC	2301	Introduction to Psycholog	у 3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
			15				17

DEGCIAD I BILIK											
First Se	mester	•	Credit 4	Second	Second Semester						
CHEM	2401	Organic Chemistry I		CHEM	2402	Organic Chemistry II	4				
MATH	2301	Calculus I	3	PHYS	2402	Modern Physics II	4				
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-					
		ernment I	3			ernment II	3				
<b>ENGL</b>	2301	English Literature I	3	ENGL	2302	English Literature II	3				
PHYS	2401	Modern Physics I	4	MATH	2302	Calculus II	3				
PYED		Physical Education	1	PYED		Physical Education	1				
			18				18				
						TOTAL HOURS	68				

<sup>\*</sup>Students deficient in mathematics must take college algebra as a remedial course. This course should be taken during the summer school term prior to the freshman year.

<sup>\*\*</sup>Approved electives are: Career Pilot, Business Management, Social Science, Mathematics, or other courses approved by the Department Manager.

<sup>\*\*\*</sup>CAPI 2310 and CAPI 2311 are substitutes for CAPI 2304 and CAPI 2305 for Rotary Wing Transition students.

## CHILD DEVELOPMENT

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester			Credit	Second	ter	Credit	
CHDV	1301	Introduction to Child		CHDV	1302	Infant and Toddler Care	3
		Development	3	CHDV	1304	Developmental Language	3
CHDV	1401	Learning Programs	4	CHDV	1305	Instructional Aids	3
CHDV	1403	Creative Expression	4	PSYC	2303	Child Growth and	
ENGL*	1309	Communications Skills	3			Development	3
PYED		Physical Education	1	SPCH	1301	Public Speaking	3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
		<del>-</del>	16			-	16

Students may apply for a Certificate of Completon after completing all first year requirements.

#### SECOND YEAR

First Semester		Credit	edit Second Semester				
CHDV	2301	The Exceptional Child	3	CHDV	2302	Parent-Child Relationship	3
CHDV	2601	Learning Theories Semi-		CHDV	2401	Pre-School Center	
		nar and Practicum	6			Management	4
GOVT	2301	State & Federal Gov-		CHDV	2602	Special Projects	6
		ernment 1	3	GOVT	2302	State & Federal Gov-	
SOCI	2301	Introduction to Sociology	/ 3			ernment II	3
ELCT**		Approved Elective	3				16
			18				
						TOTAL HOURS	66

<sup>\*</sup>ENGL 1301 may be substituted for ENGL 1309.

# CHILD DEVELOPMENT SPECIAL CHILD OPTION

# A One-Year Certificate of Completion

First Semester		Credit	Second	Semes	ter	Credit	
CHDV	1301	Introduction to Child		CHDV	1307	Techniques for Child Guid-	
		Development	3			ance for the Special Child	3
CHDV	1304	Developmental Language	3	CHDV	1401	Learning Programs	4
CHDV	1306	Physical Development an	ıd	CHDV	1403	Creative Expression	4
		Disorders In Children	3	PSYC	2303	Child Growth and	
CHDV	2301	The Exceptional Child	3			Development	3
ENGL*			3				14
PSYC	1101	College Orientation	1				
			16			TOTAL HOURS	30

<sup>\*</sup>ENGL 1301, ENGL 1307 or ENGL 1309

<sup>\*\*</sup>Approved electives are SOCI 2306, BUSS 1301, MGMT 1305, FSMG 1302, FSMG 1306, MATH 1307, or other course approved by the Department Manager.

## COMMERCIAL ART

# A Two-Year Associate in General Studies Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
ENGL	1301	Composition & Rhetoric I	3	ART.	1302	Freehand Drawing II	3
ART.	1301	Freehand Drawing I	3	ART.	1304	Creative Design II	3
ART	1303	Creative Design I	3	HIST	1302	History of the U.S.	
HIST	1301	History of the U.S.				from 1877	3
		to 1877	3	ART.	1309	Printing for Advertising	
ENGR	1301	Engineering Graphics	3			Art	3
PYED		Physical Education	1	ENGL	1302	Composition & Rhetoric I	1 3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
		_	17			•	16

#### SECOND YEAR

First Semester			Credit	Credit Second Semester			
ART	1305	Figure Drawing I	3	PHOT	1301	Intro. to Photography	3
ART.	2305	Advertising Art 1	3	ART.	2306	Advertising Art II	3
ART.	2301	Graphic Media	3	ELCT*		Approved Elective	3
ELCT*		Approved Elective	3	ENGL	2302	English Literature II	3
<b>ENGL</b>	2301	English Literature I	3	GOVT	2302	State & Federal Gov-	
PYED		Physical Education	1			ernment II	3
		•	16	PYED		Physical Education	1
						•	16
						TOTAL HOURS	65

<sup>\*</sup>Approved electives will be determined by the Art Department Manager.

# COMMUNICATIONS ELECTRONICS TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second	Second Semester		Credit	
ELTE	1301	Technical Mathematics I	3	ELTE	1302	Technical Mathematics II	3
ELTE	1401	Electrical Circuits I	4	ELTE	1402	Electrical Circuits II	4
CMET	1400**	*Electronics & Computer Skill	ls 4	ELTE	1403	Electronics Circuits I	4
CMET	1401	Digital Circuits	4	*		Communications/ENGL	
PYED		Physical Education	1			Selection(s)	3
PSYC	1101	College Orientation	1	*		Drafting/Electronics	
		-				Selection(s)	3
			17	PYED		Physical Education	1
		_				•	18

First Semester		Credit	t Second Semester			Credit	
ELTE	1404	Communications Circuits	I 4	ELTE	2403	Special Intensive Study	4
ELTE	2404	Electronics Circuits II	4	ELTE	2407	Communications Circuits	li 4
CMET	1409	CRT Systems	4	CMET*	** 2401	Microprocessors &	
*		Elective	3			Microcomputers	4
*		CMET/ELTE Selection(s)	4	ELTE	2409	Electronic Systems	
		` `	19			Troubleshooting	4
				*		Communications/ENGL	
						Selection(s)	3
						. ,	19
						TOTAL HOURS	73

<sup>\*</sup>Selected course approved by Department Chairman or authorized Central Texas College personnel according to the student need. ENGL 1301, ENGL 1309, ENGL 2309, ENGL 2350, SPCH 1301, SPCH 2303, DRDS 2403, ELTE 1150, ELTE 1151, ELTE 2250, ELTE 2251, ELTE 2350, ELTE 2301, ELTE 2402, ELTE 2406, ELTE 2408, ELTE 2410.

<sup>\*\*\*</sup>The Department Manager may substitute ELTE 1303 for CMET 1400 and ELTE 2402 for CMET 2401.

# COMPUTER ELECTRONICS TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
CMET	1400	Electronics & Computer		CMET	1403	Computer Systems &	
		Skills	4			Operational Programming	4
CMET	1401	Digital Circuits	4	ELTE	1302	Technical Mathematics II	3
ELTE	1301	Technical Mathematics I	3	ELTE	1402	Electrical Circuits II	4
ELTE	1401	Electrical Circuits I	4	ELTE	1403	Electronics Circuits I	4
PYED		Physical Education	1	DRDS*	2403	Electronics Drafting	4
PSYC	1101	College Orientation	1	PYED		Physical Education	1
		<del>-</del>	17				20

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
CMET	1409	CRT Systems	4	CMET	2401	Microprocessors &	
CMET	2402	Computer Circuits Analysi	is 4			Microcomputers	4
ELTE	2404	Electronics Circuits II	4	CMET	2404	Computer System Diag-	
ELCT**		Approved Technical				nosis & Maintenance	4
		Elective	4	ELTE	2403	Special Intensive Study	4
ENGL	1309	Communications Skills	3	ELCT**		Approved Technical	
			19			Elective	3
				ELEC		Elective	3
							18
						TOTAL HOURS	74

<sup>\*</sup>If student desires PHYS 2401 may be substituted.

# COMPUTER ELECTRONICS TECHNOLOGY (ROBOTICS OPTION)

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
CMET	1400	Electronics & Computer		CMET	1403	Computer Systems &	
		Skills	4			Operational Programming	, 4
CMET	1401	Digital Circuits	4	ELTE	1302	Technical Mathematics II	3
ELTE	1301	Technical Mathematics I	3	ELTE	1402	Electrical Circuits II	4
ELTE	1401	Electrical Circuits I	4	ELTE	1403	Electronics Circuits 1	4
PYED		Physical Education	1	CMET	1404	Fundamentals of	
PSYC	1101	College Orientation	1			Robotics	4
		-	17	PYED		Physical Education	1
							20

First Semester		Credit	Second Semester			Credit	
CMET	1409	CRT Systems	4	CMET	2401	Microprocessors &	
CMET	2405	Tendon Control				Microcomputers	4
		and Implementation	4	CMET	2406	Robotic Implementation	4
ELTE	2404	Electronics Circuits II	4	ELTE	2403	Special Intensive Study	4
DRDS*	2403	Electronics Drafting	4	ELCT**		Approved Technical	
ENGL	1309	Communications Skills	3			Elective	3
			19	ELEC		Elective	3
							18
						TOTAL HOURS	74

<sup>\*</sup>If student desires PHYS 2401 may be substituted.

<sup>\*\*</sup>Approved Technical Electives: ELTE 2406, ELTE 2409, or CMET 2403.

<sup>\*\*</sup> Approved Technical Electives: ELTE 2406, ELTE 2409, or CMET 2403.

## COMPUTER OPERATOR

### A One-Year Certificate of Completion

First Semester		Credit	Second Semester		
COSC 1401	Introduction to Computer		COSC 1304	Computer Center	Credit
	Operations and Library			Operations	3
	Management	4	COSC**	Programming Elective	4
COSC 1403	Intro. to Computer		COSC* 1402	Advanced Operations Lab	4
	Science & Computer		COSC 1406	Computer Organization	
	Programming	4		and Architecture	4
COSC 1405	Introduction to Systems		ELEC**	Approved Elective	3
	Analysis	4			18
OADM 2304	Bookkeeping 1	3			
ENGL 1309	Communications Skills	3			
PSYC 1101	College Orientation	1			
		19			
				TOTAL HOURS	37

A different Computer Science course may be substituted if approved by the Department Manager.

# COMPUTER SCIENCE A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second	Semes	ter	Credit
COSC 1403	Introduction to Computer Science & Computer	•	COSC	1404 1406	COBOL Programming Computer Organization	4
	Programming	4			& Architecture	4
COSC 1405	Introduction to Systems		ELCT*		Approved Elective ENGL 1302, SPCH 2303,	3
	Analysis	4	ENGL			3
ENGL 1301	Composition & Rhetoric I	3			or ENGL 2309	-
MATH**	Mathematics Option	3	MATH*	*	Mathematics Option	3
PYED	Physical Education	1	bAED		Physical Education	1
PSYC 1101	College Orientation	1				18
		16				

First Semester		Credit	Second	Semes	ter	Credit
COSC 2401 COSC 2404	Advanced COBOL Assembler Language Pro	4	COSC	2403	Introduction to Operating Systems & Job Control	
ELCT	gramming Elective	4 3	COSC ELCT*	2402	Language Advanced Systems Approved Elective	4 4 3
ACCO 2303 ACCO 2103 GOVT	Principles of Accounting Accounting I Lab GOVT 2301 or 2302	1 3	ACCO	2304 2104	Principles of Accounting I Accounting II Lab Approved Elective	
		18	ELCT*		TOTAL HOURS	18 70

<sup>\*</sup>Electives must be approved by the Department Manager and may include DRDS 2410 if the student meets the prerequisite.

<sup>\*\*</sup>Electives must be approved by the Department Manager.

<sup>\*\*</sup>Math option, any two of the following: MATH 1301, 1308, 1305, 1306.

# CONSUMER ELECTRONICS TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Se	mester	•	Credit	Second	Semes	ter	Credit
ELTE	1301	Technical Mathematics I	3	ELTE	1302	Technical Mathematics II	3
ELTE	1401	Electrical Circuits I	4	ELTE	1403	Electronics Circuits I	4
CMET	1400	Electronics &		ELTE	1402	Electrical Circuits II	4
		Computer Skills	4	BUSS	1301	Introduction to Business	3
CMET	1401	Digital Circuits	4	ENGL*		Approved English	3
PYED		Physical Education	1				17
PSYC	1101	College Orientation	1				
		o .	17				

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
CMET	1409	CRT Systems	4	CMET	2401	Microprocessors &	
ELTE	2410	Radio Systems	4			Microcomputers	4
ELTE	2404	Electronics Circuits II	4	COES	2408	CATV & Audio	
ELCT**		Approved Technical Elect	tive 4			Distribution Systems	4
PYED		Physical Education	1	COES	2409	Advanced TV Servicing	4
		-	17	ELCT**		Approved Technical Electiv	e 3
				ENGL*		Approved English	3
							18
						TOTAL HOURS	69

<sup>\*</sup>ENGL 1301, ENGL 1309, ENGL 2309.

The Department Manager may substitute ELTE 1303 for CMET 1400 and ELTE 2402 for CMET 2401.

#### COSMETOLOGY

### A One-Year Certificate of Completion

First Semester		Credit	Second Semester			Credit	
COSM	1601	Orientation and Introduct	ion	COSM	1604	Hair Styling, Manicuring and	i
		to Cosmetology	6			Basic Cosmetology	6
COSM	1602	Basic Cosmetology	6	COSM	1605	Facial Treatments and	
COSM	1603	Hair Coloring and				Basic Cosmetology	6
		Basic Cosmetology	6	COSM	1606	Preparation for the State	
			18			Board and Basic Cosmetolog	у 6
							18
						TOTAL HOURS	36

# COSMETOLOGY INSTRUCTOR OPTION

### **Certificate of Completion**

COSM	2301	Instructor Orientation	3
COSM	2801	Clinic Management	8
COSM	2802	Classroom Teaching	8
		TOTAL HOUSE	10

### **FACIAL SPECIALIST OPTION**

### Certificate of Completion

COSM	1401	Facial Specialist I	4
COSM	1402	Facial Specialist II	4
COSM	1403	Facial Specialist III	4
		TOTAL HOURS	12

# **MANICURISTS OPTION**

# **Certificate of Completion**

COSM	1501	Manicurist	5
		TOTAL HOURS	5

<sup>\*\*</sup>ELTE 2406, ELTE 2408, ELTE 2409, COES 2301.

# CRIMINAL JUSTICE

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Se	emester	1	Credit	Second	Semes	ter	Credit
CRIJ	1301	Introduction to Criminal		CRI	1201	Defensive Tactics	2
		Justice	3	CRII	1307	Police-Community Relations	3
CRIJ	1302	Basic Criminal Investigation	3	CRIJ	1308	Police Role in Crime &	
CRIJ	1303	Legal Aspects of Law				Delinquency	3
		Enforcement	3	CRIJ	1309	Police Organization &	
CRIJ	1304	Criminal Procedure and				Administration	3
		Evidence	3	ELCT*		Criminal Justice Elective	3
ENGL	1301	Composition and Rhetoric	: I 3	ENGL	1302	Composition and Rhetoric	c II 3
PYED	2108	Physical Conditioning	1			•	17
PSYC	1101	College Orientation	1				
			17				

#### SECOND YEAR

First Se	First Semester		Credit	Second	Semes	iter	Credit	
CRIJ	2201	Firearms	2	PSYC	2301	Introduction to Psychology	/ 3	
CRIJ	2304	Juvenile Procedures	3	SPCH	2303	<b>Business and Professional</b>		
CRIJ	2101	Emergency Medical Aid	1			Speaking	3	
GOVT	2301	State & Federal Gov-		ELCT*		Criminal Justice Elective	3	
or	2302	ernment I or II	3	ELCT		Elective	3	
SOCI	2301	Introduction to Sociology	/ 3	ELCT		Elective	3	
CRIJ*		Criminal Justice Elective	3				15	
ELCT		Elective	3					
			18			TOTAL HOURS	67	

Students receive a certificate of competency upon satisfactory completion of the core curriculum: CRIJ 1301, 1302, 1303, 1304, 1307, 1308, 1309, 2101 and 2201.

\*Students desiring to concentrate in a specific option should take the following courses:

Patrol/Traffic Option: CRIJ 1305, CRIJ 2303, CRIJ 2306, CRIJ 2308, CRIJ 2309.

Correctional/Courts Option: CRIJ 1306, CRIJ 2301, CRIJ 2307, CRIJ 2310.

Criminalistics: CRIJ 1310, CRIJ 1311, CRIJ 1312.

# DIESEL MECHANICS A Two-Year Associate in Applied Science Degree

#### **FIRST YEAR**

First Semester		Credit	Credit Second Semester				
AUTO	1400	Shop Practices & Safety	4	DIEM	1402	Diesel Engine Service	4
DIEM	1401	Diesel Engine		DIEM	1403	Fuel & Injector Systems	4
		Fundamentals	4	AUTO	1407	Brake Systems	4
ENGL	1309	Communications Skills	3	DIEM	1404	Standard Transmissions	&
TMTH	1300	Technical Mathematics I	3			Differential	4
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1			-	17
• •		0	16				

First Semester		Credit	Second Semester			Credit	
DIEM	2400	Hydraulics & Steering		DIEM	2404	Diesel Automatic	
		Systems	4			Power Trains	4
DIEM	2401	Diesel Engine Auxiliary		DIEM	2405	Advanced Diesel	
		Systems	4			Engine Service	4
DIEM	2402	Diesel Starting &		MGMT	1306	Human Relations	3
		Charging Systems	4	ELCT*		Approved Elective	4
DIEM	2403	Diesel Engine Overhaul	4	WELD	1401	Beginning Gas Welding	4
		3	16				19
						TOTAL HOURS	68

<sup>\*</sup>Suggested Electives: WELD 1402, AUTO 1405, AUTO 2406.

# **DRAFTING & DESIGN**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Credit Second Semester				
ENGR	1301	Engineering Graphics	3	DRDS	1403	Machine Drawing	4
DRDS	1401	Pictorial Drafting	4	ENGR	1302	Descriptive Geometry	3
DRDS	1402	Technical Illustration	4	DRDS	1404	Structural Drafting	4
TMTH	1300	Technical Mathematics I	3	ENGL*		Approved English	3
PYED	1000	Physical Education	1	TMTH	1301	Technical Mathematics II	3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
			16				18

#### **SECOND YEAR**

First Semester		Credit	Second	ter	Credit		
DRDS 2	401	Pipe Drafting	4	DRDS	2405	Civil Design Drafting	4
DRDS 2	402	Architectural Drafting	4	DRDS	2410	Computer Aided Drafting	g 4
DRDS 2	403	Electronic Drafting	4	DRDS	2404	Principles of Design	4
ELCT**		Approved Elective	3-4	ELCT		Elective	3-4
ENGL*		Approved English	3				15-16
			18-19				
						TOTAL HOURS	87 60

<sup>\*</sup>Approved communication electives: ENGL 1301, 1307, 1309, or 2309. If ENGL 1309 is the first course, may take ENGL 2309. If not must take SPCH 1301 or SPCH 2303 as the second course.

### **EDUCATION**

# A Two-Year Associate in Arts Degree FIRST YEAR

First Se	First Semester		Credit	Second Semester			Credit
ENGL	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric	: II 3
HIST	1301	History of the U.S.		HIST	1302	History of the U.S.	
		to 1877	3			from 1877	3
SCIE		Biology, Chemistry, Physi	CS	SCIE		Biology, Chemistry, Phy	ysics
		or Geology	4			or Geology	4
LANG		Beginning French, German	1	LANG		Beginning French, Gern	nan
		or Spanish I	4			or Spanish II	4
ELCT		Approved Elective	3	SPCH	1301	Public Speaking	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				18
			19				

#### SECOND YEAR

First Se	mester	1	Credit	Second Semester			Credit
ENGL	2301	English Literature I	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
LANG		Intermediate Language		LANG		Intermediate Language	
		or Science	3			or Science	3
PSYC	2301	Introduction to Psycholog	у 3	PSYC	2302	Personality Adjustment	3
SOCI	2301	Introduction to Sociology	3	SOCI	2302	Contemporary Social Pro	b-
PYED		Physical Education	1			lems	3
		•	16	PYED		Physical Education	1
						-	16
						TOTAL HOURS	69

If German is taken the first year, Beginning French or Spanish may be taken the second year.

<sup>\*\*</sup>DRDS 1302, DRDS 1400, DRDS 1303, DRDS 2406, MATH 1301, MATH 1302, MATH 1303, ART. 1301, OPRT 1301, or other elective approved by the Department Manager.

# **ELECTRICAL CONSTRUCTION AND MAINTENANCE**

### A One-Year Certificate of Completion

First Semester		Credit	Second Semester			Credit	
ELTE	1301	Technical Mathematics I	3	ELTE	1402	Electrical Circuits II	4
ELTE	1401	Electrical Circuits I	4	ELTE	1403	Electronics Circuits I	4
MTNT	1402	Electricity	4	ELEC	1403	Control Circuits	4
ELEC	1401	Electrical Codes	3	ELEC	2405	Motors & Motor Codes	4
ELEC	1402	Commercial Wiring	4				16
		_	18				
						TOTAL HOURS	94

# ELECTRONIC DATA PROCESSING CLERK A One-Year Certificate of Completion

First Se	First Semester		Credit	Second Seme	Credit	
COSC	1300	Computers & Society	3	COSC 1302	Data Entry/Terminal	3
COSC	1301	Data Entry/Keypunch	3	COSC*	Programming Elective	4
COSC	1401	Introduction to Computer	<b>.</b>	OADM 2305	Bookkeeping II	3
		Operations & Library		COSC*	COSC Elective	4
		Management	4	ELCT*	Approved Elective	3
OADM	2304	Bookkeeping l	3			
<b>ENGL</b>	1309	Communications Skills	3			17
PSYC	1101	College Orientation	1		TOTAL HOURS	34
		J	17			

<sup>\*</sup>Electives must be approved by Department Manager.

### **ENGINEERING**

# A Two-Year Associate in Science Degree

# FIRST YEAR

First	Semester	•	Credit	redit Second Semester		ter	Gredit	
ENG	R 1301	Engineering Graphics	3	ENGR	1302	Descriptive Geometry	3	
MAT	H 1304	Analytic Geometry	3	MATH	2302	Calculus II	3	
MAT	H 2301	Calculus I	3	ENGL	1302	Composition & Rhetoric II	1 3	
ENG	1301	Composition & Rhetoric	3	SCIE*		Biology, Chemistry, Physi	ics	
SCIE	*	Biology, Chemistry, Phys	sics			or Geology	4	
		or Geology	4	PYED		Physical Education	1	
PYEI	)	Physical Education	1	ELCT		Approved Elective	3	
PSYC	1101	College Orientation	1				17	
		-	18					

First Semester			Credit	Second Semester			Credit
HIST	1301	History of the U.S.		HIST	1302	History of the U.S.	
		to 1877	3			from 1877	3
<b>ENGL</b>	2301*	English Literature I	3	<b>ENGL</b>	2302*	English Literature II	3
COVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
MATH	2303	Advanced Calculus	3	PHYS	2402	Modern Physics II	4
PHYS	2401	Modern Physics I	4	ELCT		Approved Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
		-	17				17
						TOTAL HOURS	69

<sup>\*</sup>Students should check the senior college catalogue of the institution to which they plan to transfer for specific science and English requirements. Variations occur with different institutions.

#### **ENGLISH**

# A Two-Year Associate in Arts or in Science Degree FIRST YEAR

First Semester		Credit	Second	Semes	ter	Credit
ENGL 1301	Composition & Rhetoric !	3	ENGL	1302	Composition & Rhetoric I	3
MATH 1302	College Algebra I	3	MATH	1303	Trigonometry II	3
LANG*	Beginning French, German I		LANG*		Beginning French, German II	
	or Spanish I	4			or Spanish II	4
SCIE	Biology, Chemistry, Phys	ics	SCIE		Biology, Chemistry, Phys.	ics
	or Geology	4			or Geology	4
HIST 1301	History of the U.S. to 1877	3	HIST	1302	History of the U.S.	
PYED	Physical Education	1			from 1877	3
PSYC 1101	College Orientation	1	PYED		Physical Education	1
	-	19				18

#### SECOND YEAR

First Ser	First Semester		Credit	Second	ter	Credit	
ENGL	2301	English Literature I or		<b>ENGL</b>	2302	English Literature II or	
ENGL	2303	World Literature I	3	ENGL	2304	World Literature II	3
LANG		Intermediate French or		LANG		Intermediate French II o	r
		Spanish 1	3			Spanish II	3
SCIE		Biology, Chemistry, Phy	sics	SCIE		Biology, Chemistry, Phys	sics
		or Geology	4			or Geology	4
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
ELCT		Approved Elective	3	ELCT		Approved Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
		·	17			•	17
						TOTAL HOURS	71

<sup>\*</sup>Check particular foreign language and science requirements of insitution where student wishes to transfer.

If German is taken the first year, Beginning French or Spanish may be taken the second year.

# ENVIRONMENTAL CONTROL A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
ENCT	1301	Water & Waste Water		ENCT	1302	Aquatic Biology	3
		Technology	3	ENCT	1303	Solid Waste Management	3
CHEM	1401	General Chemistry I	4	CHEM	1402	General Chemistry II	4
<b>ENGL</b>	1301	Composition & Rhetoric l	3	ENGL	2309	Technical Writing	3
SPCH	1301	Public Speaking	3	MATH	1303	Trigonometry	3
PYED		Physical Education	1	PYED		Physical Education	1
		-	14			-	17

<sup>\*\*</sup>Check sophomore literature requirements at senior institution where student wishes to transfer. Most senior institutions will grant only lower-level credit for these courses. ENGL 2301-2302 and 2303-2304 are paired courses. Though department majors may elect any pair of courses, in any order, they must take both courses in the pair to fulfill department degree requirements.

# ENVIRONMENTAL CONTROL (cont'd) SECOND YEAR

First Semester		Credit	redit Second Semester				
ENCT	2301	Air Pollution	3	ENCT	2303	Instrumentation	Credit 3
ENCT	2302	Industrial Waste Control	3	ENCT	2304	Water Quality Control	3
ENCT	2201	Pollution Abatement		ENCT	2202	Pollution Abatement	-
		Seminar	2			Seminar	2
BIOL	2404	Microbiology	4	ENCT	2401	Water & Waste Water	-
PHYS	1401	College Physics I	4			Chemistry	4
PYED		Physical Education	1	BUSS	2301	Principles of Economics I	3
			17	PYED		Physical Education	1
						·	16
						TOTAL HOURS	64

# **FARM AND RANCH MANAGEMENT**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester			Credit	Second	ter	Credit	
FRMG	1303	Soil Science	3	FRMG	1302	Range Management	3
FRMG	1301	Wildlife Management	3	AGRI	1303	Poultry Science	3
FRMG	1304	Animal Health	3	FRMG	1305	Vegetable Production	3
AGRI	1301	Animal Husbandry	3	AGRI	1302	Agronomy	3
BIOL	1401	General Biology 1	4	BIOL	1402	General Biology II	4
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				17
		ŭ	18				

#### **SECOND YEAR**

First Semester			Credit	Second	ter	Credit		
FRM	ſG	2301	Farm Mechanics I	3	FRMG	2302	Farm Mechanics II	3
FRM	1G	2303	Feeds & Feeding	3	AGRI	2302	Horticulture	3
FRM	1G	2307	Livestock Production	3	FRMG	2306	Livestock Marketing	3
AGF	RI	2301	Entomology	3	ELCT		Elective	3
ENC	GL	1309	Communications Skills	3	MATH	1307	Business Mathematics	3
				15				15
							TOTAL HOUSE	0.5

# **FARM AND RANCH PRODUCTION**

# A Two-Year Certificate of Completion FIRST YEAR

First Semester		Credit	Second	ter	Credit		
FRMG	1303	Soil Science	3	FRMG	1302	Range Management	3
FRMG	1301*	Wildlife Management	3	AGRI	1303	Poultry Science	3
FRMG	1304	Animal Health	3	FRMG	1305	Vegetable Production	3
AGRI	1301	Animal Husbandry	3	AGRI	1302	Agronomy	3
PSYC	1101	College Orientation	1				12
			13				

First Semester			Credit	Second Semester			Credit
FRMG	2301	Farm Mechanics I	3	FRMG	2302	Farm Mechanics II	3
FRMG	2303	Feeds & Feeding	3	AGRI	2302	Horticulture	3
FRMG	2307	Livestock Production	3	FRMG	2306	Livestock Marketing	3
AGRI	2301	Entomology	3	FRMG	2401	Food Preservation	4
			12				13
						TOTAL HOURS	50

<sup>\*</sup>AGRI 2303 may be selected in place of FRMG 1301.

# FIRE PROTECTION TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Sc	First Semester		Credit	Credit Second Semester			
FPRT	1301	Fundamentals of Fire		FPRT	1302	Fire Prevention	3
		Protection	3	FPRT	1305	Fire Administration II	3
FPRT	1303	Fire Protection Systems	3	FPRT*	1308	Fire Service Chemistry II	3
FPRT	1304	Fire Administration I	3	MATH	1301**	*Intermediate Algebra	3
FPRT	1307*	Fire Service Chemistry I	3	SPCH	1301	Public Speaking	3
<b>ENGL</b>	1307	Business English	3	PYED		Physical Education	1
PYED		Physical Education	1				16
PSYC	1101	College Orientation	1				
			17				

#### SECOND YEAR

First Se	mester		Credit	Second	Semes	ter	Credit
<b>FPRT</b>	2301	Industrial Fire Protection	I 3	FPRT	2302	Industrial Fire Protection	II 3
<b>FPRT</b>	2303	Hazardous Material I	3	<b>FPRT</b>	2306	Fire & Arson Investigation	3
<b>FPRT</b>	2305	Building Codes & Constru	1C-	<b>FPRT</b>	2404	Fire Fighting Tactics	
		tion	3			and Strategy	4
<b>ENGL</b>	2309	Technical Writing	3	FPRT**	•	Fire Protection Technology	/ 3
GOVT	2301	State & Federal Government		ELCT		Approved Elective	3
or	2302	I & II	3				
ELCT		Elective	3				16
			18				
						TOTAL HOURS	67

<sup>\*</sup>CHEM 1401 & CHEM 1402 may be substituted for FPRT 1307 & FPRT 1308.

### FOOD PRODUCTION

# A One-Year Certificate of Completion

First Semester		Credit	Credit Second Semester				
FRMG	1303	Soil Science	3	FRMG	1305	Vegetable Production	3
FRMG	1304	Animal Health	3	AGRI	2302	Horticulture	3
FRMG	2303	Feeds & Feeding	3	FRMG	2401	Food Preservation	4
FRMG	2307	Livestock Production	3	AGRI	1302	Agronomy	3
PSYC	1101	College Orientation	1			- •	13
			13			TOTAL HOURS	26

# FOOD SERVICE MANAGEMENT

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		·	Credit Second Semester			ter	Credit
FSMG	1401	Food Preparation & Servin	g 4	FSMG	1305	Food Purchasing	3
<b>FSMG</b>	1302	Nutrition	3	FSMG	1306	Menu Planning	3
<b>FSMG</b>	1303	Sanitation & Safety	3	MATH	1307	Business Math	3
**		MGMT/FSMG Selection(s)	3	**		BUSS/MGMT/FSMG/H	MMG
•		Communications/ENGL				Selection(s)	3
		Selection(s)	3	•		SPCH Selection(s)	3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
PYED		Physical Education	1			-	16
		-	18				

<sup>\*\*</sup>Fire Protection Technology Electives: FPRT 2304, 2308, 2309.

<sup>\*\*\*</sup>MATH 1307 may be substituted where FPRT 1307 & 1308 are offered.

# FOOD SERVICE MANAGEMENT (cont'd) SECOND YEAR

First Semester Credit Second Semester		Credit					
FSMG	2304	Marketing & Sales Pro-		FSMG	2305	Financial Management	3
		motion	3	FSMG	2406	Management Practice II	4
FSMG	2307	Hospitality Industry Law	3	**		MGMT Selection(s)	3
FSMG	2405	Management Practice I	4	**		MGMT/BUSS/FSMG	
MISC	1450	Microcomputers for				Selection(s)	3
		Business	4	ELCT		Elective	3
**		MGMT/FSMG Selection(	s} 3				16
			17			TOTAL HOURS	67

<sup>\*</sup>ENGL 1301, ENGL 1307, ENGL 2309, ENGL 2350

ACCO 2303, ACCO 2304, ACCO 2103, ACCO 2104, FSMG 1150, FSMG 1151, FSMG 1250, FSMG 1304, FSMG 1308, FSMG 2150, FSMG 2151, FSMG 2201, FSMG 2250, FSMG 2251, FSMG 2252, FSMG 2306, FSMG 2352, FSMG 2353, FSMG 2354, FSMG 2355, FSMG 2356, FSMG 2401, FSMG 2451, FSMG 2452, HMMG 1300, HMMG 1302, HMMG 1303, HMMG 2306, MGMT 2302, MGMT 2304, MGMT 2309, MGMT 2352, MGMT 1305, and FSMG 2402.

# FOOD SERVICE OPERATION OPTION

### A One-Year Certificate of Completion

First Semester		Credit	Second Semester			Credit
FSMG 1302	Nutrition	3	FSMG	1309	Short Order Food	
FSMG 1303	Sanitation & Safety	3			Preparation	3
MATH 1307	Business Math	3	FSMG	1402	Basic Baking and	
FSMG 1401	Food Preparation and Serv	ing 4			Pastry Production	4
ENGL 1309	Communications Skills	3	FSMG	2401	Classical Food	
PSYC 1101	College Orientation	1			Preparation	4
	- 0	17	ELCT		Elective	3
						14
					TOTAL HOURS	31

# FOREIGN LANGUAGE

# A Two-Year Associate in Arts or Science Degree FIRST YEAR

First Semester	Gr	redit Second Sem		iemester	
ENGL 1301 LANG	Composition & Rhetoric I Beginning French, German or Spanish	3 4	HIST 1302 ENGL 1302 LANG	History of the U.S. from 187 Composition & Rhetoric I Beginning French, Germa	1 3
матн*	Approved Mathematics Elective	3	матн*	or Spanish Approved Mathematics	4
HIST 1301 SCIE	History of the U.S. to 1877 Biology, Chemistry, Physics or Geology		SCIE	Elective Biology, Chemistry, Phys or Geology	ics 4
PYED PSYC 1101	Physical Education College Orientation	1 1	PYED	Physical Education	1 18

<sup>\*</sup>SPCH 1301, SPCH 2303

<sup>\*\*</sup>Selected courses approved by Department Manager or authorized Central Texas College personnel according to the student need.

# FOREIGN LANGUAGE (cont'd)

#### SECOND YEAR

First Semester		Credit	Second Semes	Credit	
ENGL 2301 LANG	English Literature I Intermediate French or	3	ENGL 2302 LANG	English Literature II Intermediate French or	3
Ling	Spanish/Elective	3		Spanish/Elective	3
GOVT 2301	State & Federal Gov-		GOVT 2302	State & Federal Gov-	
	ernment I	3		ernment II	3
SCIE	Biology, Chemistry, Phys	sics	SCIE	Biology, Chemistry, Phy	Sics
	or Geology	4		or Geology	4
LANG**	Second Language	4	LANG**	Second Language	4
PYED	Physical Education	1	PYED	Physical Education	1
		18			18
				TOTAL HOURS	73

<sup>\*</sup>Check senior college catalogue for specific math requirements.

### GENERAL SECRETARIAL

### A One-Year Certificate of Completion

First Semest	First Semester		Second 5	Credit		
OADM 130	1* Beginning Shorthand	3	OADM	1302*	Intermediate Shorthand	3
OADM 130	3* Beginning Typewriting	3	OADM	1304*	Intermediate Typewriting	3
OADM 130	5 Clerical Practice	3	OADM	1306	Secretarial Practice	3
OADM 130	9 Business Mathematics		OADM	1308	<b>Business Correspondence</b>	3
	& Calculating Machines	3	OADM	1307	Word Processing	3
ENGL 130	7 Business English	3	PYED		Physical Education	1
PYED 110	1 College Orientation	1				
		17				16
					TOTAL HOURS	33

<sup>\*</sup>Beginning or advanced levels of shorthand and typewriting will be determined by the student's previous training in these skills and/or by placement tests. Electives may be chosen by students who receive advanced standing in shorthand and typing. Courses may be chosen leading toward general, medical, or legal secretarial programs upon department approval.

### GEOLOGY

### A Two-Year Associate in Science Degree FIRST YEAR

First Semester		Credit Second Semester			ter	Credit	
GEOL	1401	Physical Geology	4	GEOL	1402	Historical Geology	4
MATH	1302	College Algebra	3	MATH	1303	Trigonometry	3
HIST	1301	History of the U.S. to 1877	3	HIST	1302	History of the U.S. from 187	7 3
CHEM	1401	General Chemistry	4	CHEM	1402	General Chemistry	4
ENGL	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric II	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				18
			19				

<sup>\*\*</sup>Second language requirement varies with senior colleges. Check senior college catalogue carefully.

# GEOLOGY (cont'd) SECOND YEAR

First Sen	First Semester			Second	ter	Credit	
MATH	2301	Calculus I	3	MATH	2302	Calculus II	3
BIOL	2401	Invertebrate Zoology	4	BIOL	2401	Vertebrate Zoology	4
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
MATH	1304	Analytic Geometry	3	PSYC	2301	Introduction to Psychology	у 3
ENGL	2301	English Literature I	3	ENGL	2302	English Literature II	3
PYED		Physical Education	1	PYED		Physical Education	1
			17				17
						TOTAL HOURS	71

Students should check the catalogue of the institute to which they plan to transfer as requirements may vary.

### HEALTH SERVICE MANAGEMENT

# A Two-Year Associate in General Studies Degree FIRST YEAR

First Semester Credit Second Semester		ter	Credit				
BIOL	1405	Human Anatomy	4	BIOL	1406	Human Physiology	4
BUSS	1301	Introduction to Business	3	BUSS	2301	Principles of	
ENGL	1301	Composition & Rhetoric I	. 3			Economics I	3
MATH	1305	Finite Mathematics I	3	ENGL	1302	Composition and	
HEOE	1301	Introduction to Health				Rhetoric II	3
		Service Management	3	MATH	1305	Finite Mathematics II	3
PSYC	1101	College Orientation	1	SOCI	2301	Introduction to	
PYED		Physical Education	1			Sociology	3
		•	18	PYED		Physical Education	1
							17

#### **SECOND YEAR**

First Semester		C	redit	Second Semester			Credit
BUSS	2302	Principles of Economics II	3	ACCO	2304	Principles of Accounting	II 3
ACCO	2303	Principles of Accounting I	3	ENGL	2302	English Literature II	3
ENGL	2301	English Literature I	3	GOVT	2302	State and Federal	
GOVT	2301	State and Federal				Government II	3
		Government I	3	HEOE	2301	Medical Terminology	3
PSYC	2301	Introduction to Psychology	3	ELEC		Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
		•	16				16
						TOTAL HOURS	67

# HORSE MANAGEMENT

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second	Semes	ter	Credit	
FRMG	1304	Animal Health	3	FRMG	1307	Intermediate Horsemans	nip 3
FRMG	1306	Elementary Horsemanship	3	AGRI	1302	Agronomy	3
AGRI	1301	Animal Husbandry	3	BIOL	1402	General Biology II	4
BIOL	1401	General Biology I	4	MATH	1307	Business Mathematics	3
ENGL	1309	Communications Skills	3	PYED		Physical Education	1
PYED		Physical Education	1	ELCT*		Approved Elective	3
PSYC	1101	College Orientation	1			• •	17
		•	18				

# HORSE MANAGEMENT (cont'd) SECOND YEAR

First Semester		Credit	Second Semester			Credit
FRMG 2307	Livestock Production	3	FRMG	1302	Range Management	3
FRMG 2304	Horse Production	3	FRMG	2302	Farm Mechanics II	3
		3	FRMG	2303	Feeds & Feeding	3
AGRI 2301	Entomology	3	FRMG	2305	Advanced Equitation	3
ELCT*	Approved Elective	3	ELCT*		Approved Elective	3
	• •	15				15
					TOTAL HOURS	65

<sup>\*</sup>Electives: AGRI 1303, AGRI 2302, AGRI 2303, FRMG 1301, FRMG 1303, FRMG 1304, FRMG 1305, FRMG 2301, FRMG 2306, FRMG 2401, FRMG 2402, or other course approved by the Department Manager.

# HOTEL-MOTEL MANAGEMENT A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit
HMMG 1302	Hotel/Motel Organization		HMMG	1300	Food and Beverage	
	and Administration	3			Management	3
FSMG 1401	Food Preparation & Servi	ng 4	HMMG	1303	Front Office Procedures	3
ELCT*	Approved Elective	3	HMMG	1304	Hotel/Motel Sales Promotion	3
ENGL 1309	Communications Skills	3	FSMG	1303	Sanitation and Safety	3
MATH 1307	Business Mathematics	3	FSMG	1305	Food Purchasing	3
PYED	Physical Education	1	PYED		Physical Education	1
PSYC 1101	College Orientation	1				16
		10				

#### SECOND YEAR

First Semester	Credit	Second	Semest	er	Credit
MISC 1450 Microcon	nputers for Business 4	HMMG	2301	Hotel/Motel Law	3
HMMG 2401 Hotel/M	otel Internship I 4	HMMG	2304	Hotel/Motel Financial	
MGMT 2302 Personn	el Management 3			Management	3
ELCT* Approv	ed Elective 3	HMMG	2402	Hotel/Motel Internship II	4
ACCO 2303** Principl	es of Accounting I 3	ELCT		Elective	3
ACCO 2103 Accoun	ting I Lab 1	ACCO	2304**	Principles of Accounting I	<b>1</b> 3
	18	ACCO	2104	Accounting II Lab	1
				S .	17
				TOTAL HOURS	69

<sup>\*</sup>Any FSMG, HMMG, ENGL 1301, ENGL 1302, ENGL 1307, ENGL 2309, SPCH 1301, SPCH 2303, MGMT 1305, or other courses approved by the Department Manager.

# INSTITUTIONAL COOKING

### A One-Year Certificate of Completion

First Semester		Credit	Second	Credit			
FSMG	1302	Nutrition	3	FSMG	1306	Menu Planning	3
FSMG	1303	Sanitation and Safety	3	FSMG	1307	Meat Science	3
FSMG	1401	Food Preparation	4	FSMG	2401	Classical Food	
MATH	1307	Business Math	3			Preparation	4
			13	FSMG	2402	Exhibition Work	4
							14
						TOTAL HOURS	27

<sup>\*\*</sup>OADM 2304 and OADM 2305 may be substituted.

# **JOURNALISM**

# A Two-Year Associate in General Studies Degree FIRST YEAR

First Se	mester		Credit	Second	Semes	ter	Credit
JOUR	1401	Communications Media	4	<b>JOUR</b>	1402	News Gathering & Reporting	
ENGL	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric II	3
HIST	1301	History of the U.S. to 1877	3	HIST	1302	History of the U.S. from 187	
SPCH	1301	Public Speaking	3	PSYC	2301	Introduction to Psycholog	
ELCT*		Approved Elective	3	ELCT*		Approved Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1			•	17
			18				

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
ENGL	2301	English Literature I	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
BUSS	2301	Principles of Economics I	3	BUSS	2302	Principles of Economics I	I 3
SOCI	2301	Introduction to Sociology	3	SOCI	2302	Contemporary Social Problem	ns 3
PYED		Physical Education	1	PYED		Physical Education	1
			13	ELCT*		Approved Elective	3
							16
						TOTAL HOURS	64

<sup>\*</sup>Check with senior college or university catalogue for appropriate course choice.

### LAW ENFORCEMENT

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Credit Second Semester				
LAWE	1301	Introduction to Criminal		LAWE	1201	Defensive Tactics	2
		Justice	3	LAWE	1307	Police-Community Relations	3
LAWE	1302	Basic Criminal Investigation	3	LAWE	1308	Police Role in Crime	
LAWE	1303	Legal Aspects of Law				& Delinquency	3
		Enforcement	3	LAWE	1309	Police Organization &	
LAWE	1304	Criminal Procedure and				Administration	3
		Evidence	3	ENGL	1302	Composition and Rhetoric II	3
ENGL	1301	Composition and Rhetoric I	3	LAWE*		Law Enforcement Elective	3
PSYC	1101	College Orientation	1				17
PYED	2108	Physical Conditioning	1				
		·	17				

#### SECOND YEAR

First Se	mester		Credit	Second Seme	ster	Credit
LAWE	2101	Emergency Medical Aid	1	PSYC 2301	Introduction to Psycholog	у 3
LAWE	2201	Firearms	2	SPCH 2303	Business Speech	3
LAWE	2304	Juvenile Procedures	3	LAWE*	Law Enforcement Elective	3
COVT		State & Federal		ELCT	Elective	3
or	2302	Government I or II	3	ELCT	Elective	3
SOCI	2301	Introduction to Sociology	3			15
LAWE*		Law Enforcement Elective	3			
ELCT		Elective	3			
			10		TOTAL HOURS	67

Students receive a certificate of competency upon satisfactory completion of the core curriculum: LAWE 1301, 1302, 1303, 1304, 1307, 1308, 1309, 2101 and 2201.

Students desiring to concentrate in a specific option should take the following courses:

Patrol/Traffic Option: LAWE 1305, 2303, 2306, and 2309.

Correctional/Courts Option: LAWE 1306, 2301, 2307, and 2310.

Criminalistics: LAWE 1310, 1311, and 1312.

Electives: May be a choice of any course desired by the student to include EMET 1401.

### LEGAL ASSISTANT

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Se	mester		Credit	Second	Semes	ter	Credit
LEGA	1301	Introduction to Legal		LEGA	1401	Legal Writing, Legal Docu-	
		Assistant	3			ments, Wills, Trusts,	
LEGA	1302	Techniques of Legal				and Probate	4
		Research	3	LEGA	1305	Law of Real Property and	
LEGA	1304	Principles of Family Law	3			Real Estate Transactions	3
<b>ENGL</b>	1301	Composition and Rhetoric	13	ACCO	2303	Principles of Accounting I	3
GOVT	2301	State & Federal Gov-		ACCO	2103	Accounting I Lab	1
		ernment I	3	ENGL	1302	Composition & Rhetoric II	3
PSYC	1101	College Orientation	1	ELCT*		Approved Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
		•	17				18

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
LEGA	2301	Tort and Insurance Law	&	LEGA	2402	Income Taxation and	
		Claims Investigation	3			Legal Accounting	4
LEGA	2401	Techniques of Legal		LEGA	2403	Legal Office Ethics	
		Practice	4			and Management	4
GOVT	2302	State and Federal		LEGA	2302	Personal Property, Sales	
		Government II	3			and Credit Transactions	3
ELCT*		Approved Elective	3	ELCT*		Approved Elective	3
ELCT		Elective	3	ELCT		Elective	3
			16				17
						TOTAL HOURS	68

Approved Electives: LEGA 2303, LEGA 2304, LEGAL 2305, LEGA 2404, ACCO 2304, COSC 1306, COSC 1403, ENGL 2309, HIST 1301, HIST 1302, MGMT 1301, MGMT 1306, OADM 1303, OADM 1304, OADM 1307, PSYC 2301, SOCI 2301, SOCI 2303, SOCI 2306, and SPCH 1301.

### MACHINE TOOLS OPERATOR

### **One-Year Certificate Of Completion**

First Se	First Semester			Second	Credit		
MATL	1401	Precision Tools and		MATL	1501	Advanced Engine Lathe	5
		Layout	4	MATL	1502	Milling Machine:	
MATL	1402	Engine Lathe, Cutting				Set Up, Cutters & Tools	5
		Tools	4	MATL	1503	Grinding Machines: Univers	al
DRDS	1302	Blueprint Reading	3			Cutters and Tools	5
TMTH	1300	Technical Mathematics I	3	DRDS	1400	Fundamentals of	
PSYC	1101	College Orientation	1			Drafting	4
		-	15			_	19
						TOTAL HOURS	34

<sup>\*\*</sup>Students who do not have a minimum of one year work experience in the legal field must take LEGA 2404.

### MAINTENANCE TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester	Credit	
MTNT 1	1400	Shop Practice & Safety	4	WELD 1401 Beginning Gas	Welding 4
MTNT :	1401	Carpentry I	4	MTNT** 1402 Electricity	4
AIRC :	1400	Air Conditioning & Refrig	g-	AIRC 1403 Heating Syste	ms 4
		eration Theory & Appli-		ENGL 1309 Communication	ons Skills 3
		cation	4	ELCT* Approved Ele	ctive 3
TMTH :	1300	Technical Mathematics I	3		
PSYC :	1101	College Orientation	1		18
PYED		Physical Education	1		
		•	17		

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
MTNT	2402	Carpentry II	4	MTNT	2401	Masonry	4
MTNT	2403	Plumbing I	4	DRDS	1303	Architectural Blueprint Readi	ing 3
AIRC	1402	Household Refrigeration		MTNT	2404	Painting & Refinishing	4
		Systems	4	AIRC	1404	Residential Air Conditioning	4
ELCT*		Approved Elective	4	ELCT		Elective	3
PYED		Physical Education	1				18
		-	17				
						POTAL HOURS	70

<sup>\*</sup>AIRC 1405, AIRC 2403, DRDS 1400, MGMT 1302, MGMT 1304, MGMT 1305, OADM 2304, SESY 1401, WELD 1402.

# **MARKETING**

# A Two-Year Associate in General Studies

#### FIRST YEAR

First Se	First Semester		Credit	Second Semester			Credit
HIST	1301	History of the U.S. to 1877	3	HIST	1302	History of the U.S. from 1873	7 3
<b>ENGL</b>	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric II	3
SCIE		Science Elective	4	MATH	1304	Analytic Geometry	3
BUSS	1301	Introduction to Business	3	GOVT	2301	State and Federal	
PSYC	1101	College Orientation	1			Government I	3
PSYC	2301	Intro to Psychology	3	SPCH	1301	Public Speaking	3
PYED		Physical Education	1	PYED		Physical Education	1
			18				16

First Se	mester		Credit	redit Second Semester			Credit	
ACCO	2303	Principles of Accounting I	3	ACCO	2304	Principles of Accounting I	1 3	
COSC	1403	Introduction to Computer		COSC	1405	Introduction to Systems		
		Science	4			Analysis	4	
BUSS	2301	Principles of Economics I	3	BUSS	2302	Principles of Economics II	3	
MATH	2301	Calculus I	3	GOVT	2302	State and Federal		
SOCI	2301	Introduction to Sociology	3			Government II	3	
PYED		Physical Education	1	SCIE		Science	4	
			17	PYED		Physical Education	1	
							18	
						TOTAL HOURS	69	

<sup>\*\*</sup>Approved Prerequisite for AIRC 1402, 1403, 1404 in place of AIRC 1401.

### **MATHEMATICS**

# A Two-Year Associate in Arts or Science Degree FIRST YEAR

First Semester		Credit	Second	ter	Credit		
MATH	1302	College Algebra	3	MATH	1304	Analytic Geometry	3
MATH	1303	Trigonometry	3	SCIE		Science or Foreign	
SCIE		Science or Foreign		LANG		Language Elective	4
LANG		Language Elective	4	ELCT*		Approved Elective	3
ENGL	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric II	3
HIST	1301	History of the U.S. to 1877	3	HIST	1302	History of the U.S. from 1877	7 3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				17
		_	18				

#### **SECOND YEAR**

First Semester			Credit	Second	ter	Credit	
MATH	2301	Calculus I	3	MATH	2302	Calculus II	3
ENGL	2301	English Literature I	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
SCIE		Biology, Chemistry, Phy	sics	SCIE		Biology, Chemistry, Phy	sics
		or Geology	4			or Geology	4
ELCT*		Approved Elective	3	ELCT*		Approved Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
			17			-	17
						TOTAL HOURS	69

This curriculum is recommended for students pursuing either an Associate in Arts degree or an Associate in Science degree from Central Texas College. Choice of electives determines the degree. Freshmen with adequate background may enroll in Math 2301 (Calculus I) during the Fall Semester with the permission of the Manager of the Mathematics Department. Students should consult the catalogue of the institution to which they plan to transfer for required or recommended courses.

### MEDICAL TECHNOLOGY

# A Two-Year Associate in General Studies Degree FIRST YEAR

First Semester		Credit	edit Second Semester				
BIOL	1405	Human Anatomy	4	BIOL	1406	Human Physiology	4
CHEM	1401	General Chemistry I	4	CHEM	1402	General Chemistry II	4
ENGL	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric II	3
HIST	1301	History of the U.S. to 1877	3	HIST	1302	History of the U.S. from 1877	7 3
MATH	1301	Intermediate Algebra	3	MATH	1303	Trigonometry	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				18
		_	19				

First Semester		Credit	Second	ter	Credit		
PHYS	1401	College Physics I	4	PSYC	2301	Introduction to Psycholog	gy 3
GOVT	2301	State & Federal Government	1 3	GOVT	2302	State & Federal Government	П 3
BIOL	2404	Microbiology	4	PHYS	1402	College Physics II	4
BIOL	2401	Invertebrate Zoology	4	BIOL	2303	Genetics	3
CHEM	2401	Organic Chemistry I	4	СНЕМ	2402	Organic Chemistry II	4
			19				17
						TOTAL HOURS	73

### MICROCOMPUTER TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Seme	Credit		
MISC	1451	Intro to Microcomputer		MISC 1453	Advanced BASIC	
		Programming	4		Programming	4
MISC	1452	Intro to Microcomputer		MISC 1454	PASCAL Programming	4
		Concepts	4	ELCT**	Approved Elective	3
<b>ENGL</b>	1307	Business English	3	MATH*	Approved Math Option	3
MATH'	*	Approved Math Option	3	PYED	Physical Education	1
PSYC	1101	College Orientation	1			15
PYED		Physical Education	1			
		-	16			

# SECOND YEAR

First Sc	First Semester		Credit	Second Semester			Credit
MISC	2451	Micro Assembler		MISC 24	153	Systems Programming an	d
		Language Programming	4			Operating Systems	4
MISC	2452	Microcomputer Telecom-		MISC 24	154	Applied Microcomputer	
		munications	4			Applications	4
ELCT		Elective	3	ELCT**		Approved Elective	3
ACCO	2303	Principles of Accounting	1 3	ELCT**		Approved Elective	3
ACCO	2103	Accounting I Lab	1	ACCO 23	04	Principles of Accounting	II 3
SPCH	2303	Business and Professiona	d	ACCO 21	104	Accounting II Lab	1
		Speaking	3				18
			18			TOTAL HOURS	67

<sup>\*</sup>MATH Option - MATH 1301; MATH 1307; MATH 1308.

# **MID-MANAGEMENT**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester		
MISC 1450	Microcomputers for		ELCT*	Approved Elective	3
	Business	4	MDMG 1402	Mid-Management Internship	II 4
MGMT 1306	Human Relations	3	MGMT 2302	Personnel Management	3
MDMG 1401	Mid-Management Internship	I 4	MATH 1307	Business Mathematics	3
BUSS	BUSS 1301 or		ELCT*	Approved Elective	3
MGMT	MGMT 1305	3	PYED	Physical Education	1
ENGL	ENGL 1301 or 1307	3			17
PYED	Physical Education	1			
PSYC 1101	College Orientation	1			

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<sup>\*\*</sup>Electives: MISC 2455, COSC 1403, COSC 1404, COSC 1405, COSC 1406, COSC 1407, CMET 1400, CMET 1401, CMET 1403, ELTE 1403, or other COSC, CMET or ELTE courses for which the proper prerequisites have been taken.

# MID-MANAGEMENT (cont'd) SECOND YEAR

First Seme	ester		Credit	Second	Semest	ter	Credit
MGMT 2	309	Supervision	3	MGMT	2301	Marketing Principles	3
MDMG 24	401	Mid-Management Internship		MDMG	2402	Mid-Management Internship	
		ui .	4			IV	4
ACCO 2	303	Principles of Accounting	I 3	ACCO	2304	Principles of Accounting	II 3
ACCO 2	103	Accounting I Lab	1	ACCO	2104	Accounting II Lab	1
ELCT		BUSS 2301 or 2302	3	ELCT		MGMT 2305, 2306 or REAE	
ELCT		SPCH 1301 or 2303	3			2305	3
				ELCT		Elective	3
			17				17
						TOTAL HOURS	70

NOTICE: Mid-Management is a controlled entry program with various state and school requirements that apply to the program (i.e., approved training station, hours worked per week, geographic location, etc.). Before completing the curriculum requirements of this particular program, please check with a Mid-Management instructor co-ordinator.

#### MID-MANAGEMENT

Finance and Banking Option

### A Two-Year Associate in Applied Science Degree

#### **FIRST YEAR**

First Se	First Semester		Credit	Second	Second Semester		
FIBA	1301	Banking Principles	3	FIBA	1302	Money and Banking	3
FIBA	1401	Finance and Banking		FIBA	1402	Finance and Banking	
		Internship I	4			Internship II	4
BUSS	1301	Introduction to Business	3	MATH	1307	Business Mathematics	3
ENGL		ENGL 1301 or ENGL 130	7 3	MISC	1450	Microcomputers for	
MGMT	1306	Human Relations	3			Business	4
PSYC	1101	College Orientation	1	SPCH		SPCH 1301 or SPCH 2303	3
PYED		Physical Education	1	PYED		Physical Education	1
		-	18			•	18

First Se	mester		Credit	Second Semester			Credit
FIBA	2401	Finance and Banking		FIBA	2402	Finance and Banking	
		Internship III	4			Internship IV	4
FIBA*		Finance and Banking		FIBA*		Finance and Banking	
		Elective	3			Elective	3
BUSS	2301	Economics I	3	BUSS	2302	Economics II	3
ACCO	2303	Principles of Accounting	I 3	ACCO	2304	Principles of Accounting I	I 3
ACCO	2103	Accounting I Lab	1	ACCO	2104	Accounting II Lab	1
ELCT		Elective	3	ELCT*		Approved MGMT/BUSS/	
			17			FIBA Elective	3
							17
						TOTAL HOURS:	70

<sup>\*</sup>Approved FIBA electives: FIBA 2301, FIBA 2302, FIBA 2303, FIBA 2304, FIBA 2305, FIBA 2306, and REAE 2304.

<sup>\*</sup>SOCI 2301, PSYC 2301, GOVT 2301, or other elective approved by the Department Manager.

Management and Business electives must be approved by the Department Manager.

### **MUSIC**

# A Two-Year Associate in General Studies Degree FIRST YEAR

First Sc	mester		Credit	Second	Semes	ter	Credit
ENGL	1301	Composition & Rhetoric l	3	ENGL	1302	Composition & Rhetoric	II 3
HIST	1301	History of the U.S. to 1877	3	HIST	1302	History of the U.S. from 1	877 3
MUSI	1205	Ear Training I	2	MUSI	1206	Ear Training II	2
MUSI	1301	Music Fundamentals	3	MUSI	1302	Music Theory	3
MUSI	1107	Choir	1	MUSI	1107	Choir	1
MUSI		Approved Applied Music	;	MUSI		Approved Applied Music	
		Elective	1-2			Elective	1-2
PYED		Physical Education	1	MUSI	1305	Music Appreciation	3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
			5-16				17-18

#### SECOND YEAR

First Se	mester		Credit	Second	Semes	ter	Credit
<b>ENGL</b>	2301	English Literature l	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Government	13	GOVT	2302	State & Federal Governme	ent II 3
MUSI	1303	Music Literature I	3	MUSI	1303	Music Literature II	3
MUSI	2401	Intermediate Harmony	4	MUSI	2402	Advanced Harmony	4
MUSI	1107	Choir	1	MUSI	1107	Choir	1
MUSI		Approved Applied Music	;	MUSI Approved Applied N		Approved Applied Mus	ic
		Elective	2-3			Elective	2-3
PYED		Physical Education	1	PYED		Physical Education	1
		*	7-18			-	17-18
						TOTAL HOURS	86-70

# NURSING ASSOCIATE DEGREE NURSING

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Sc	First Semester		Credit	Second Semester			Credit
NURI	1901	Fundamentals of		NURI	1902	Medical-Surgical	
		Nursing	9			Norsing I	9
BIOL	1405	Human Anatomy	4	BIOL	1406	Human Physiology	4
PSYC	2301	Introduction to Psy-		PSYC	2303	Child Growth & Devel-	
		chology	3			opment	3
PSYC	1101	College Orientation	1				16
			17				
Summe	r Seme	ster					
ENGL	1301	Composition & Rhetoric	1 3				
SOCI	2301	Introduction to Sociology	7 3				
			6				

#### SECOND YEAR

First Se	First Semester			Second Semester			Credit
NURI	1903	Maternal & Child		NURI	2901	Medical-Surgical Nurs-	
		Health Nursing	9			ing II	9
BIOL	2404	Microbiology	4	NURI	2101	Nursing Trends Seminar	1
SPCH	1301	Public Speaking	3				10
			16				
Summe	r Seme	ster					
NURI	2301	Psychiatric Nursing	3				
ELCT		Elective	3				
			6				
						TOTAL HOURS	71

NOTICE: This program has special admission requirements. Contact the Director of Nursing for admission requirements and procedures.

# NURSING VOCATIONAL CLOCK HOUR PROGRAM

# **Certificate of Completion**

#### Non-Credit

Clock

	CIOCK			CIUUR
CEVN 010 CEVN 010	 429 429 858		Vocational Nursing III Vocational Nursing IV	438 867
			TOTAL HOURS	1725

CEVN 0101, 0102, 0103, 0104 Vocational Nursing I, II, III, and IV 1725: Credit: 0

This is a one-year non-credit Vocational Nursing Program that satisfies the requirements established by the Board of Vocational Nurse Examiners. After successful completion of this program, the graduate is eligible to take the licensing examination administered by the Texas State Board of Vocational Nurse Examiners.

# OCCUPATIONAL SAFETY AND HEALTH TECHNOLOGY

# A Two-Year Associate in Applied Science Degree

#### **FIRST YEAR**

First Se	mester		Credit	Second	Semes	ter	Credit
FPRT	2301	Industrial Fire		ENGL	2309	Technical Writing	3
		Protection I	3	OSHT	1301	Safety Program, Organiza	ation
OSHT	1302	Safety and Health Standa	ards,			and Administration	3
		Codes and Regulations	3	OSHT	1303	Power Source Hazard	
ENGL	1301	Composition & Rhetoric I	3			Controls	3
TMTH	1300	Technical Mathematics I	3	OSHT	1401	Industrial Chemical Hazards	. 4
CHEM	1404	Introduction to		OSHT	2301	Recordkeeping &	
		General Chemistry	4			Accident Investigation	3
PSYC	1101	College Orientation	1	PYED		Physical Education	1
PYED		Physical Education	1				17
			18				

First Sc	First Semester		Credit	Second Semester			Credit
<b>FPRT</b>	2302	Industrial Fire Protection II	3	OSHT	2305	Occupational Safety &	
OSHT	2302	Environmental Health	3			Health Management	3
OSHT	2303	Occupational Safety		OSHT	2306	Safety Planning,	
		Engineering Techniques	3			Layout & Arrangement	3
OSHT	2304	Contingency Planning	3	OSHT	2401	Instrumentation & Analy	sis 4
SPCH	2303	Business and		OSHT	2402	Occupational Disease	
		Professional Speaking	3			Control	4
				PSYC		Introduction to Psycholog	gy 3
			15			•	17
						TOTAL HOURS	67

### OFFICE ASSISTANT

### A One-Year Certificate of Completion

First Semester		Credit	Second Semester	Credit
OADM 1303	* Beginning Typewriting	3	OADM 1304* Intermediate Typewriting	3
OADM 1305	Clerical Practice	3	OADM 1308 Business Correspondence	
OADM 2304	Bookkeeping I	3	OADM 1307 Word Processing	3
OADM 1309	Business Mathematics		OADM 2305 Bookkeeping II	3
	& Calculating Machines	3	MGMT 1305 Introduction to Management	3
ENGL 1307	Business English	3	PYED Physical Education	1
PAED	Physical Education	1	·	16
PSYC 110:	College Orientation	1		
		17	TOTAL HOURS	33

<sup>\*</sup>Beginning or advanced levels of typewriting will be determined by the student's previous training in this skill and/or by placement tests. Electives may be chosen by students who receive advanced standing in typing. Courses may be chosen leading toward general, medical, or legal secretarial programs upon department approval.

### **OFFICE MANAGEMENT**

# A Two-Year Associate in Applied Science Degree

### FIRST YEAR

First Semester		Credit	Second Semeste	Credit	
OADM 1303	* Beginning Typewriting	3	OADM 1304* !	Intermediate Typewriting	3
OADM 1305	Clerical Practice	3	OADM 1308	Business Correspondence	3
OADM 2304	Bookkeeping I	3	OADM 2305	Bookkeeping II	3
MGMT 1305	Introduction to		OADM 1309	Business Mathematics &	
	Management	3	(	Calculating Machines	3
ENGL 1307	Business English	3	OADM 1307	Word Processing	3
PYED	Physical Education	1	PYED	Physical Education	1
PSYC 1101	College Orientation	1			16
	•	17			

First Semester	Credi	it Second Semes	ter	Credit
MGMT 1304 Work	Organization 3	MGMT 2302	Personnel Management	3
MGMT 2305 Busine	ss Law I 3	MGMT 2306	Business Law II	3
COSC 1300 Compu	iters and Society 3	MGMT 2309	Supervision	3
SPCH 2303 Busine	ss and Professional	OADM 2307	Office Administration &	
Speaki	ing 3		Procedures	3
ELCT** Appro	ved Elective 3	ELCT**	Approved Elective	3
,	15			15
			TOTAL HOURS	63

<sup>\*</sup>Levels of typewriting will be determined by the student's previous training in this skill and/or by placement tests. Students who receive advanced standing in typewriting may select an approved elective to fulfill hour requirements.

<sup>\*\*</sup>MGMT 2301, MGMT 2310, OADM 2308, OADM 2309, or other electives approved by the Department Manager.

# **OFFSET PRINTING**

### A One-Year Certificate of Completion

First Semeste	r (	Credit	Second	Semes	ter	Credit
OPRT 1301	Introduction to Offset Prin	ıt-	OPRT	1305	Copy Preparation and	
	ing	3			Layout	3
OPRT 1302	Camera and Darkroom Procedures, Stripping and	<b>)-</b>	OPRT	1306	Camera and Darkroom Pr cedures, Stripping and	0-
	Platemaking I	3			Platemaking II	3
OPRT 1303	Offset Press Operation I	3	OPRT	1307	Offset Press Operation II	3
OPRT 1304	Bindery Operations, Cost		OPRT	1308	Offset Printing Equipmen	t
	Estimating and Pricing	3			Maintenance	3
OADM 1303	Beginning Typewriting	3	OADM	1309	Business Mathematics &	
PSYC 1101	College Orientation	1			Calculating Machines	3
	•	16				15
					TOTAL HOURS	31

### PETROLEUM TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit	
PETT	1301	Introduction to Petroleum	1	PETT	1303	Rotary Drilling Fluids	3
		Technology	3	PETT	1304	Oil Field Records	3
PETT	1302	Petroleum Geology	3	PETT	1402	Petroleum Logging &	
PETT	1401	Rig & Drilling Equipment	4			Mapping	4
CHEM	1401	General Chemistry I	4	CHEM	1402	General Chemistry II	4
ТМТН	1300	Technical Mathematics I	3	ENGL	1307	Business English	3
PSYC	1101	College Orientation	1			•	17
		-	18				

#### SECOND YEAR

First Semester		Credit	Second Semester			Credit	
PETT	2301	Pumping Equipment	3	PETT	2303	Natural Gas Production	3
PETT	2302	Well Completion Methods	s 3	PETT	2402	Petroleum Refining Meth	-
PETT	2401	Petroleum Production				ods and Operations	4
		Methods	4	PETT*		Petroleum Technology	
ENGL	2309	Technical Writing	3			Elective	3
MGMT	1302	Safety (OSHA)	3	PETT*		Petroleum Technology	
			16			Elective	3
				MGMT	2309	Supervision	3
						•	16
						TOTAL HOURS	67

<sup>\*</sup>Petroleum Technology Electives: PETT 2304, PETT 2305, PETT 2306, PETT 2307.

# **PHOTOGRAPHY**

#### A One-Year Certificate of Completion

First Semester		Credit	Second Semester			Credit	
PHOT	1301	Introduction to Photog-		PHOT	1303	Advanced Photography	3
		raphy	3	PHOT	1304	Commercial Photography	3
PHOT	1302	Portrait Photography	3	PHOT	1305	Advanced Print Making	3
TELE	1406	Television Film	4	TELE	2407	Electronic News	
ENGL		Approved Communication	ns			Gathering	4
		Elective	3	ELCT*		Approved Elective	3
ELCT*		Approved Elective	3				16
PSYC	1101	College Orientation	1				
		•	17			TOTAL HOURS	33

<sup>\*</sup>ART. 1309, PHOT 1306, BUSS 1301, SPCH 1301, OPRT 1302, TELE 1403, TELE 2402, TELE 2408, or other electives approved by Department Manager.

### **PHOTOGRAPHY**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	edit Second Semester				
PHOT	1401	Introduction to Photo-		PHOT	1403	Advanced Photography	4
		raphy	4	PHOT	1404	Commercial Photography	4
PHOT	1402	Portrait Photography	4	PHOT	1405	Advanced Printmaking	4
PHOT	1406*	Color Photography I	4	PHOT	1407	Color Photography II	4
ENGL	1309	Communication Skills	3	ELCT‡		Approved Elective	3
MATH	1307	Business Mathematics	3	PYED		Physical Education	1
PYED		Physical Education	1				20
PSYC	1101	College Orientation	1				
			20				

#### **SECOND YEAR**

First Semester		Credit	edit Second Semester			
ELCT	Elective	3	ELCT	Elective	3	
PHOT 2403	Portrait Retouching	4	PHOT 2404	Photographic Production	4	
ENGL 2309	Technical Writing	3	BUSS 1301	Introduction to Business	3	
JOUR 1401	Communications Media	4	OADM 2304	Bookkeeping I	3	
ELCT:	Approved Elective	3	ELCT:	Approved Elective	3	
PYED	Physical Education	1	PYED	Physical Education	1	
	-	18		•	17	
				TOTAL HOURS	75	

<sup>\*</sup>TELE 1406 - Television Film may be substituted for PHOT 1406.

†TELE 2407 - Electronic News Gathering may be substituted for PHOT 1407.

‡Approved Electives: ART. 1300, SPCH 1301, OPRT 1302, TELE 1403, TELE 2402, TELE 2408, or other elective approved by the Department Manager.

### PHYSICAL EDUCATION

# A Two-Year Associate in General Studies Degree FIRST YEAR

First Semes	ter	Credit	Second	Semes	ter	Credit
ENGL 130	1 Composition & Rhetoric	I 3	ENGL	1302	Composition & Rhetoric I	I 3
HIST 130	1 History of the U.S.		HIST	1302	History of the U.S.	
	to 1877	3			from 1877	3
BIOL 140	01 General Biology I	4	BIOL	1402	General Biology II	4
SPCH 130	11 Public Speaking	3	ELCT		Approved Mathematics	
PYED 130	12 Foundations of Health	3			Elective	3
PYED	Physical Education	1	PYED	1301	Foundations of Physical	
PSYC 110	11 College Orientation	1			Education	3
		18	PYED		Physical Education	1
			PYED		Physical Education	1
						18

#### SECOND YEAR

First Semester		C	redit	Second	Credit		
PSYC	2301	Introduction to Psychology	3	ENGL	2302	English Literature II	3
<b>ENGL</b>	2301	English Literature I	3	GOVT	2302	State & Federal	
GOVT	2301	State & Federal				Government II	3
		Government I	3	SOCI	2301	Introduction to Sociology	3
PYED	2301	Sports Officiating	3	PYED	2302	Safety & First Aid	3
BIOL	1405	Human Anatomy	4	ELCT		Approved Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
PYED		Physical Education	1	PYED		Physical Education	1
		•	18				17
						TOTAL HOURS	71

Students majoring in Physical Education may not repeat activity courses for credit.

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

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### PLANT PRODUCTION

### A One-Year Certificate of Completion

First Semester		Credit	Second Semester			Credit	
FRMG	1303	Soil Science	3	FRMG	1305	Vegetable Production	3
FRMG	2301	Farm Mechanics I	3	AGRI	2302	Horticulture	3
AGRI	2301	Entomology	3	FRMG	2401	Food Preservation	4
AGRI	2303	Natural Resource Con-		AGRI	1302	Agronomy	3
		servation	3				13
PSYC	1101	College Orientation	1				
			13			TOTAL HOURS	26

### **PRE-MED**

# A Two-Year Associate in Science Degree FIRST YEAR

First Semester		Credit	Credit Second Semester				
BIOL	1401	General Biology I	4	BIOL	1402	General Biology II	4
CHEM	1401	General Chemistry I	4	CHEM	1402	General Chemistry II	4
MATH	1302	College Algebra	3	MATH	1303	Trigonometry	3
ENGL	1301	Composition & Rhetoric	I 3	ENGL	1302	Composition & Rhetoric I	I 3
HIST	1301	History of the U.S.		HIST	1302	History of the U.S.	
		to 1877	3			from 1877	3
PYED		Physical Education	1	PYED		Physical Education	1
PSYC	1101	College Orientation	1				18
		_	19				

#### **SECOND YEAR**

First Semester		Credit	Second Semester			Credit	
BIOL	2401	Invertebrate Zoology	4	BIOL	2402	Vertebrate Zoology	4
CHEM	2401	Organic Chemistry I	4	CHEM	2402	Organic Chemistry II	4
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment l	3			ernment II	3
<b>ENGL</b>	2301	English Literature I	3	ENGL	2302	English Literature II	3
PYED		Physical Education	1	ELCT		Approved Elective	4
			15	PYED		Physical Education	1
							19
						TOTAL HOURS	71

# REAL ESTATE A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester	Credit Second Semester					
MISC 1450	Microcomputers for Business	4	REAE	1302	Real Estate Marketing	3
MGMT 1306	Human Relations	3	REAE	2304	Real Estate Finance	3
REAE 1301	Real Estate Funda-		BUSS	2301	Principles of Economics I	3
	mentals	3	MATH	1307	<b>Business Mathematics</b>	3
BUSS 1301	Introduction to Business	3	ELCT*		Approved Social	
ENGL	ENGL 1301 or 1307	3			Science Elective	3
PYED	Physical Education	1	PYED		Physical Education	1
PSYC 1101	College Orientation	1				16
	•	18				

# REAL ESTATE (cont'd) SECOND YEAR

First Semester		Credit Secon		ond Semester			
REAE	2401	Real Estate Internship I	4	MGMT	2301	Marketing Principles	3
BUSS	2302	Principles of Economics II	1 3	REAE	2402	Real Estate Internship II	4
ACCO	2303	Principles of Accounting I	3	ACCO	2304	Principles of Accounting I	I 3
ACCO	2103	Accounting I Lab	1	ACCO	2104	Accounting II Lab	1
REAE*		Approved Real Estate		REAE*		Approved Real Estate	
		Elective	3			Elective	3
ELCT		Elective	3	SPCH		SPCH 1301 or 2303	3
			17				17
						TOTAL HOURS	68

<sup>\*</sup>All electives must be approved by the Department Manager.

Approved Real Estate electives are: REAE 1300, REAE 2302, REAE 2303, REAE 2305, REAE 2307, REAE 2308 or other courses approved by the Department Manager.

NOTICE: Real estate is a controlled entry program with various state and school requirements that apply to the program (i.e., approved training station, hours worked per week, geographic location, etc.). Before completing the curriculum requirements of this program, please check with a Mid-Management instructor/co-ordinator.

### RECREATION

# A Two-Year Associate in General Studies Degree FIRST YEAR

First Se	mester	•	Credit	Second	Semes	ter	Credit
<b>ENGL</b>	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric II	I 3
HIST	1301	History of the U.S.		HIST	1302	History of the U.S.	
		to 1877	3			from 1877	3
BIOL	1401	General Biology I	4	BIOL	1402	General Biology II	4
SPCH	1301	Public Speaking	3	RECR	1304	Principles of Recreational	l
RECR	1303	Foundations of Recreation	<b>.</b> 3			Leadership	3
PYED		Physical Education	1	PYED	1301	Foundations of Physical	
PSYC	1101	College Orientation	1			Education	3
			18	PYED		Physical Education	1
				PYED		Physical Education	1
							18

First Semester			Credit	Second Semester			Credit
ENGL	2301	English Literature I	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Gov-		GOVT	2302	State & Federal Gov-	
		ernment I	3			ernment II	3
ART.	2311	Fiberarts I	3	SOCI	2301	Introduction to Sociology	3
PSYC	2301	Introduction to Psy-		PYED	2301	Sports Officiating	3
		chology	3	RECR		Approved Recreation Ac-	
PYED	2302	Safety & First Aid	3			tivity	3
PYED		Physical Education	1	PYED		Physical Education	1
PYED		Physical Education	1	PYED		Physical Education	1
			17				17
						TOTAL HOURS	70

# RECREATION LEADERSHIP

# A Two-Year Certificate of Completion FIRST YEAR

First Se	mester	C	redit	Second	Semes	ter	Credit
ENGL		Approved English Elective	3	ENGL		Approved English Elective	3
MATH		Approved Math Elective	3	SPCH	1301	Public Speaking	3
RECR	1301	Foundations of Recreation	3	RECR	1302	Principles of Recreational	
PYED	1301	Foundations of Physical				Leadership	3
		Education	3	RECR	1303	Theory & Practice of	
PYED	1101	Volleyball & Softball	1			Teaching Sports	3
PYED	1107	Beginning Tennis	1	PYED	1100	Football & Basketball	1
PSYC	1101	College Orientation	1	PYED	1102	Beginning Badminton	1
			15	PYED	1105	Folk & Square Dance	1
							15

#### SECOND YEAR

First Se	emester	(	Credit	Second	Second Semester			
PSYC	2301	Introduction to Psychology	/ 3	SOCI	2301	Introduction to Sociology	3	
ART.	2311	Fiberarts 1	3	ART.	2312	Fiberarts II	3	
RECR	2301	Camp Counseling	3	PYED	2302	Safety & First Aid	3	
RECR	2303	Theory & Practice of		RECR	2305	Field Work in Recreation	3	
		Teaching Aquatics	3	RECR	2304	Outdoor Recreational		
PYED	2301	Sports Officiating	3			Sport	3	
PYED	2104	Tumbling	1	PYED	2105	Figure Development		
			16			or		
				PYED	2108	Physical Conditioning	1	
							16	
						TOTAL HOURS	62	

Physical Education one-hour activity courses may be taken in any sequence, but may not be repeated.

# SMALL GAS ENGINE REPAIR A Two-Year Associate in Applied Science Degree FIRST YEAR

First Se	First Semester		Credit	Second	Second Semester			
SGER	1400	Shop Practice & Safety	4	SGER	1407	Small Gas Engine Service	4	
SGER	1401	Gas Engine Fundamental	s 4	SGER	1408	Chain Saw Service		
WELD	1401	Beginning Gas Welding	4			and Repair	4	
TMTH	1300	Technical Mathematics I	3	SGER	1409	Motorcycle Service	4	
PSYC	1101	College Orientation	1	ENGL	1309	Communications Skills	3	
PYED		Physical Education	1	PYED		Physical Education	1	
		_	17				16	

First Semester			Credit	Second	Semes	ter	Credit
SGER	2407	Off-Road Small Engine		SGER	2311	Shop Organization	
		Repair and Service	4			& Management	3
SGER	2410	Lawn & Garden		SGER	2408	Outboard Motor	
		Equipment Service	4			Service and Repair	4
WELD	1402	Beginning Arc Welding	4	OADM	2304	Bookkeeping 1	3
ELCT*		Approved Elective	3	ELCT*		Approved Elective	3
			15	ELCT		Elective	3
							16
						TOTAL HOURS	64

<sup>\*</sup>Approved Electives: SGER 2409, AUTO 1401, BUSS 1301, MGMT 1302, MGMT 1304, MGMT 1305, MGMT 1306, MGMT 1309, MGMT 2302, MGMT 2305, WELD 1404.

### SOCIAL SCIENCE

# A Two-Year Associate in Arts Degree FIRST YEAR

First Se	First Semester		Credit	Second	Second Semester			
<b>ENGL</b>	1301	Composition & Rhetoric I	3	ENGL	1302	Composition & Rhetoric I	I 3	
HIST	1301	History of the U.S.		HIST	1302	History of the U.S.		
		to 1877	3			from 1877	3	
LANG		Beginning French, Ger-		LANG		Beginning French, Ger-		
		man, or Spanish I	4			man, or Spanish II	4	
SCIE		Biology, Chemistry, Phy-		SCIE		Biology, Chemistry, Phy-		
		sics or Geology	4			sics or Geology	4	
MATH	1301	Intermediate Algebra	3	MATH	1303	Trigonometry	3	
PYED		Physical Education	1	PYED		Physical Education	1	
							18	
PSYC	1101	College Orientation	1					
		_	19					

#### SECOND YEAR

First Semester			Credit	redit Second Semester			
<b>ENGL</b>	2301	English Literature I	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Covernment	I 3	GOVT	2302	State & Federal Government	II 3
LANG		Intermediate French or		LANG		Intermediate French or	
		Spanish I	3			Spanish II	3
ELCT		Social Science Elective	3	ELCT		Social Science Elective	3
ELCT		Approved Elective	3	ELCT		Approved Elective	3
PYED		Physical Education	1	PYED		Physical Education	1
		-	16			-	16
						TOTAL HOURS	69

<sup>\*</sup>Social Science course should be related to major or minor if possible.

Students taking German the first year may take Beginning French or Spanish the second year. Students should check the catalogue of the institution to which they plan to transfer as requirements may vary.

# SPEECH A Two-Year Associate in Arts Degree

**FIRST YEAR** 

#### Credit Second Semester First Semester Credit Composition & Rhetoric I ENGL 1301 ENGL 1302 Composition & Rhetoric II HIST 1301 History of the U.S. HIST 1302 History of the U.S. to 1877 from 1877 3 3 LANG LANG Beginning French, Ger-Beginning French, German or Spanish I man or Spanish II SPCH Public Speaking SPCH 1301 3 1303 Oral Interpretation 3 SPCH 1302 Voice & Diction 3 ELCT\* Approved Elective 3 Physical Education PYED PYED 1 Physical Education 1 PSYC College Orientation 1101 1 17

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# SPEECH (cont'd) SECOND YEAR

First Semester			Credit	Second Semester			Credit
ENGL	2301	English Literature I	3	ENGL	2302	English Literature II	3
GOVT	2301	State & Federal Govern-		GOVT	2302	State & Federal Govern-	
		ment I	3			ment II	3
LANG		Intermediate French or		LANG		Intermediate French or	
		Spanish Elective	3			Spanish Elective	3
SPCH	2304	Discussion	3	SPCH	2305	Interpersonal	
ELCT		Elective	3			Communications	3
PYED		Physical Education	1	ELCT		Elective	3
		•	16	PYED		Physical Education	1
							16
						TOTAL HOURS	67

Students taking German the first year may take Beginning French or Spanish the second year.

### **SUPERVISION**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second	ter	Credit	
ENGL 1307	Business English	3	COSC	1300	Computers and Society	3
MATH 1307	Business Math	3	MGMT	1302	Safety (OSHA)	3
MGMT 1304	Work Organization	3	OADM	1308	Business Correspondence	3
MGMT 1305	Introduction to Management	3	SOCI	2301	Introduction to Sociology	3
MGMT 1306	Human Relations	3	SPCH	1301	Public Speaking	3
PSYC 1101	College Orientation	1	PYED		Physical Education	1
PYED	Physical Education	1			•	16
		17				

### **SECOND YEAR**

First Semester		Credit	Second Semester			Credit
MGMT 2302	Personnel Management	3	MGMT	2306	Business Law II	3
MGMT 2304	Labor-Management Relations	3	MGMT	2309	Supervision	3
MGMT 2305	Business Law I	3	MGMT	2310	Personnel Counseling	3
ELCT*	Approved Elective	3	ELCT		Elective	3
PSYC 2301	Introduction to Psycholog	у 3	PSYC	2302	Personality Adjustment	3
		15			- '	15
					TOTAL HOURS	63

# **TELECOMMUNICATIONS**

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Se	First Semester		Credit	Credit Second Semester			
TELE	1301	Introduction to Broad-		TELE	1304	Broadcast Sales	3
		casting	3	TELE	1406	Television Film	4
TELE	1402	Beginning Radio Produc-		TELE	1307	Broadcast Station	
		tion	4			Management	3
TELE	1403	Beginning Television		SPCH	1301	Public Speaking	3
		Production	4	ENGL	1302	Composition & Rhetoric II	3
JOUR	1401	Communications Media	4	PYED		Physical Education	1
ENGL	1301	Composition & Rhetoric I	3				17
PSYC	1101	College Orientation	1				
			19				

# TELECOMMUNICATIONS (cont'd)

#### **SECOND YEAR**

First Semester			Credit	Second	ter	Credit	
TELE	2305	Broadcast Writing	3	TELE	2402	Advanced Television	
TELE	2407	Electronic News				Production	4
		Gathering	4	TELE	2403	Advanced Radio Produc-	
TELE	2301	Technical Aspects of				tion	4
		Broadcasting	3	TELE	2306	Telecommunications Seminar	r 3
TELE	2409	Telecommunications Fiel	d	TELE	2408	Telecommunications	
		Projects I	4			Practicum	4
ELCT*		Approved Elective	3	ELCT		Elective	3
PYED		Physical Education	1				18
			18				
						TOTAL HOURS	72

<sup>\*</sup>TELE 1405, TELE 2410, JOUR 1402, or other electives approved by the Department Manager.

# TRAINING MANAGEMENT SYSTEMS

### A Two-Year Associate in Applied Science Degree

#### First Year

First Semester		Credit	Second Semes	iter	Credit
ENGL 1309	Communication Skills	3	BUSS 2306	Personal Finance	3
MGMT 1201	Management of Performance		MGMT 1205	Analysis of Training	
	Oriented Training	2		Requirements	2
MGMT 1202	Briefing Techniques, Aids	r	MGMT 1206	Professional Resource	
	& Devices	2		Management	2
MGMT 1203	<b>Evaluation of Instruction</b>		MGMT 1207	Professional Development	
	and Training	2		of the Manager	2
MGMT 1204	Setting Goals & Objective	s 2	MGMT 1208	Training Management System	n 2
ELCT*	Approved Elective	3	MGMT 1209	Managerial Theories	2
PSYC 1101	College Orientation	1	ELCT*	Approved Elective	3
PYED	Physical Education	1	PYED	Physical Education	1
	-	16			17

First Semester	Credit	Second Semester			Credit	
MGMT 2201	Job Performance and		SPCH	2303	Business and	
	Motivation	2			Professional Speaking	3
MGMT 2202	Individual Orientation		MGMT	2204	Assessing of Training	
	Techniques	2			Standards, Goals	
MGMT 2203	Group Orientation				and Objectives	2
	Techniques	2	MGMT	2205	Management Training	
MGMT 2350	Performance Counseling	&			Theories	2
	Certification by		MGMT	2206	Management Learning	
	Army Supervisor	3			Strategies	2
ENGL 2350	Effective Army Writing	1	HIST	2350	Military History I	3
ELCT*	Approved Elective	3	ELCT		Elective	3
PYED	Physical Education	1	PYED		Physical Education	1
		14			-	16
					TOTAL HOURS	63

<sup>\*</sup>Approved Electives: MGMT 1158, MGMT 2150, MGMT 2151, MGMT 2152, MGMT 2153, MGMT 2154, MGMT 2155, MGMT 2156, MGMT 2157, MGMT 2158, MGMT 2159, MGMT 2160, MGMT 2161, MGMT 2162, MGMT 2163, MGMT 2250. MGMT 2351.

### TRANSPORTATION TECHNOLOGY

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Seme	ster	Credit	
ENGL	ENGL 1301 or 1309	3	COMM	SPCH 1301 or ENGL 2309	3 3	
MATH	MATH 1302 or 1307	3	OADM 2305	Bookkeeping II or		
OADM 2304	Bookkkeeping I or		ACCO 2304	Principles of Accounting	II 3	
ACCO 2303	Principles of Accounting	1 3	TRAN 1303	Economics of		
TRAN 1301	Introduction to			Transportation I	3	
	Transportation	3	TRAN 1304	Interstate Commerce		
TRAN 1302	International Trade	3		and Practice	3	
PSYC 1101	College Orientation	1	MGMT 1306	Human Relations	3	
PYED	Physical Education	1	PYED	Physical Education	1	
	•	17		•	16	

#### **SECOND YEAR**

First Semester		Credit	Second Sem	Credit	
MGMT 2302	Personnel Management	3	MGMT 2309	Supervision	3
TRAN 2301	Economics of Transpor-		TRAN 230	Traffic Management II	3
	tation II	3	TRAN 230	2 Transportation Law and	
TRAN	Transportation Elective	3		Regulation	3
TRAN 2303	Traffic Management I	3	TRAN	Transportation Elective	3
TRAN 2311	Transportation Marketin	g 3	ELCT	Elective	3
		15			15
				TOTAL HOURS	63

# WATER SYSTEM TECHNOLOGY

# A One-Year Certificate of Completion

First Semester		Credit	Second Semester			Credit
TMTH 1300	Technical Mathematics I	3	TMTH	1301	Technical Mathematics II	3
WATS 1300	Water System Design		WATS	1305	Plumbing Layout and	
	and Operation	3			Devices	3
WATS 1302	Instrumentation and		WATS	1306	Water System	
	Controls	3			Hydraulics	3
WATS 1303	Aquatic Biology and		WATS	1401	Advance Instrumentation	1
	Water Chemistry	3			and Controls	4
WATS 1304	Water Quality Control	3				13
		15				
					TOTAL HOURS	28

#### WELDING

# A Two-Year Associate in Applied Science Degree FIRST YEAR

First Semester		Credit	Second Semester			Credit		
	WELD	1401	Beginning Gas Welding	4	WELD	1403	Intermediate Arc Welding	4
	WELD	1402	Beginning Arc Welding	4	WELD	1404	Beginning GMAW	
	DRDS	1400	Fundamentals of Drafting	3 4			& GTAW (MIG & TIG)	4
	TMTH	1300	Technical Mathematics I	3	WELD	1405	Advanced Gas Welding	
	PYED		Physical Education	1			& Cutting Processes	4
	PSYC	1101	College Orientation	1	ENGL	1309	Communications Skills	3
				17	PYED		Physical Education	1
								16

#### SECOND YEAR

First Semester			Credit	Second Semester			Credit
WELD	2401	Advanced Arc Welding	4	WELD	2404	Advanced Pipe Welding	4
WELD	2402	Beginning Pipe Welding	4	WELD	2405	Weld Testing &	
WELD	2403	Advanced GMAW				Inspection	4
		& GTAW (MIG & TIG)	4	WELD	2406	Welding Fabrication	
ELCT*		Approved Elective	3-4			& Layout	4
TMTH	1301	Technical Mathematics I	I 3	ELCT*		Approved Elective	3-4
		1	8-19			• •	15-16
						TOTAL HOURS	66-68

<sup>\*</sup>AUTO 1400, ENGR 1301, MGMT 1305, MGMT 1302, or other courses approved by the Department Manager.

### COURSE DESCRIPTIONS

# Accounting (ACCO)

ACCO 2303 Principles of Accounting I (3-0) Credit: 3
Analysis and recording of financial transactions, use of journals and ledgers, internal control of cash transactions, income statement and balance sheet, payroll records and reports, depreciation systems, inventory methods, sale and exchange of assets, special journals and voucher systems, accounting for inflation, generally accepted accounting principles.

ACCO 2304 Principles of Accounting II (3-0) Credit: 3
Continues Accounting I. Partnership and corporate accounting methods and procedures, statement of changes in financial position, consolidated financial statements, departments and branches, manufacturing systems, cost accounting systems, capital budgeting, breakeven analysis, financial statement analysis, income tax accounting and business decisions.

ACCO 2305 Introduction to 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: ACCO 2304.

ACCO 2309 Intermediate Accounting I (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: ACCO 2304 with a minimum grade of C.

ACCO 2310 Intermediate Accounting II (3-0) Credit: 3 Continuation of Intermediate Accounting I. 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: ACCO 2309.

ACCO 2103 Accounting I Lab (0-1) Credit: 1 ACCO 2104 Accounting II Lab (0-1) Credit: 1

# Accounting Technology (ACCT)

ACCT 2303 Fundamentals of Accounting I (3-0) Credit:

Analysis and recording of financial transactions, use of journals and ledgers, internal control of cash transactions, income statement and balance sheet, payroll records and reports, depreciation systems, inventory methods, sale and exchange of assets, special journals and voucher systems, accounting for inflation, generally accepted accounting principles.

ACCT 2304 Fundamentals of Accounting II (3-0) Credit: 3

Continues Accounting I. Partnership and corporate accounting methods and procedures, statement of changes in financial position, consolidated financial statements, departments and branches, manufacturing systems, cost accounting systems, capital budgeting, breakeven analysis, financial statement analysis, income tax accounting and business decisions.

ACCT 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: ACCT 2304.

ACCT 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 and methods of accounting for materials, direct labor, and the distribution of overhead expenses, as well as cost records, operating reports and budgetary control. Prerequisite: ACCT 2304.

ACCT 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: ACCT 2304 with a minimum grade of C.

ACCT 2310 Fundamentals of Accounting IV (3-0)

Continuation of ACCT 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: ACCT 2309.

ACCT 2311 Accounting and Financial Information System I

(3-0) Credit: 3

This course is a study of the overall flow systems emphasizing financial data and computerized systems. It covers flow and logic concepts, developing meaningful control concepts and data reporting techniques. Prerequisite: ACCT 2304.

ACCT 2312 Accounting and Financial Information System II

(3-0) Credit: 3

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

# Agriculture (AGRI)

AGRI 1301 Animal Husbandry

(2-4) Credit: 3

An introductory survey course. Farm animals as a source of food, clothing, and labor. The place of livestock in farming and ranching. The value of heredity and breeding for improvement, importance of judging, pedigrees, and proper nutrition. The place and adaptation of each class of livestock: show ring classification, and market and slaughter classes.

AGRI 1302 Agronomy (2-4) Credit: 3

Classification and distribution of farm crops, their use, production, and identification will be studied with emphasis being placed on those crops important to Texas. New crop improvement, value of rotation, use and need of fertilizer will be determined by soil testing. Meadow and pasture management will be practiced on the College farm. Weeds, plant diseases, and insect enemies will be discussed.

AGRI 1303 Poultry Science

(3-2) Credit: 3

A basic course in poultry production involving breed, breeding, selection, feeding, care, and management. Marketing is emphasized because it is a specialized industry.

AGRI 2301 Entomology

(2-4) Credit: 3

Chemical control of insects which affect crops and livestock. Control of external and internal parasites affecting animals. Safety factors in dealing with insecticides.

#### AGRI 2302 Horticulture

(3-2)Credit: 3 Growth and structure of fruit, vegetable, and ornamental plants. Effect of environment on plant productions and principles and methods of propagation.

Natural Resource Conservation (3-0) Credit: 3 An introduction to the conservation of renewable natural resources. Includes the development for multiple use of water, range, forests, and wildlife.

### Air Conditioning and Refrigeration (AIRC)

# AIRC 1400 Air Conditioning & Refrigeration Theory & Application

(2-4) Credit: 4

This course deals with the basic physical principles of an air conditioning system. Introduction to heat, heat movement, temperature, pressure, refrigerants, temperature pressure relationship to refrigerants, the refrigeration cycle, the major components of refrigeration system and their relationship to each other. Introduction to the basic electrical devices found in air conditioning systems, i.e., motors, controls, etc. Use of special air

conditioning tools and equipment, soldering and welding equipment. The use and care of specialized electrical testing and recording instruments is stressed.

**Basic Electrical Circuits** 

(2-4) Credit: 4

Instruction in basic electricity and its application. Introduces the student to the various electrical devices, their importance in electrical circuits, including those used in residential wiring. Methods of wire connections for new and repair service, making and testing electrical circuits, and the use of electrical measuring and testing equipment.

Household Refrigeration Systems

(2-4) Credit: 4

Application of the refrigeration cycle to household refrigeration, including refrigerators, home freezers, and window air conditioning units. Instruction in service procedures for locating and correcting problems in the mechanical and electrical systems of units; trouble shooting, repairing and charging refrigeration equipment. Development of shop skills in the use of special refrigeration tools and equipment. Prerequisites: AIRC 1400 and AIRC 1401 or MTNT 1402.

AIRC 1403 **Heating Systems**  (2-4)Credit: 4

The study of types of heating equipment and their application. Service procedures for locating and correcting problems in heating systems. Study of manufacturers information on various heating units and equipment, to enable the student to determine proper installation. Prerequisites: AIRC 1400 and AIRC 1401 or MTNT 1402.

AIRC 1404 Residential Air Conditioning

(2-4)Credit: 4

Instruction in heat transfer through material, heat loss and heat gain calculations for residential heating and air conditioning systems, equipment selection and location, duct sizing and layout, controls and control circuits installation and service procedures. Prerequisites: AIRC 1400 and AIRC 1401 or MTNT 1402.

**Test Instruments** AIRC 1405

(3-3) Credit: 4

This course will provide the student with an understanding of the special instruments used in the diagnosis of problems in heating, air conditioning and solar energy equipment. Both the care and use of the instruments will be covered.

Control Theory and Application

(2-4)Credit: 4

Instruction in the operation of control devices, how they can be applied and varied to achieve the designed conditions. Includes interpretation and drawings of schematic and pictorial control circuit diagrams. Prerequisites: AIRC 1400 and AIRC 1401 or MTNT 1402.

Commercial Refrigeration Systems

Types of commercial refrigeration units and systems. Instruction in controls and control circuits in commercial refrigeration. Heat loss and heat gain calculations for commercial applications, equipment selections, locating and piping procedures. Instruction in installation and service procedures for different systems. Prerequisites: AIRC 1400 and AIRC 1401 or MTNT 1402.

Commercial Air Conditioning Systems (2-4) Credit: 4

A course designed to cover heat transfer, heat loss and heat gain calculations as applied to commercial heating and air conditioning. Psychometrics of conditioned air, duct design and layout, equipment selection and location, shop drawings, controls and control circuits for automatic conditioning of air. Prerequisites: AIRC 1400 and AIRC 1401 or MTNT 1402, AIRC 1404.

80

# Allied Health (MHOE)

Science for Allied Health Personnel Credit: 3 (3-0)MHOE 1301 An introduction to the basic sciences for students interested in careers in the allied health fields, including the basic terminology of anatomy, physiology, microbiology and pathology.

### **Animal Production**

(See Farm & Ranch Mgmt.)

# Anthropology (ANTH)

ANTH 2301 Physical Anthropology

(3-0)Credit: 3

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

ANTH 2302 Cultural Anthropology (3-0) Credit: 3
Principles of cultural anthropology, cultural history from the Mesolithic stage through civilization, culture, and social organization in preliterate and literate societies, impact of western culture on preliterate societies.

# Applied Management

(See Mgmt.)

# **Applied Music**

(See Music)

# Architecture (ARCH)

ARCH 2301 Architectural Drawing

 $\{2-3\}$ Credit: 3

A consideration of various types of buildings and rooms, specifications, and lettering. Each student will make a full set of working drawings of a dwelling. Prerequisite: ENGR 1301 and DRDS 2404.

# Art (ART.)

ART. 1301, 1302 Freehand Drawing I & II

(2-4) Credit: 3, 3

These courses involve a study of the basic drawing skills including both abstraction and expressive drawing in charcoal, pencil, pen, wash, conte, and mixed media.

ART. 1303, 1304 Creative Design I & II

(2-4) Credit: 3. 3

These courses give basic instruction in the elements and principles of design, with emphasis on the study of form and color theory. Design I is a study of design in two dimensions, while Design II is a study of three dimensional design problems.

ART. 1305, 1306 Figure Drawing I & II

(2-4) Credit: 3, 3

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

**History & Appreciation of Art I** 

(3-0) Credit: 3

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

History & Appreciation of Art II

(3-0) Credit: 3

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

ART. 1309 Printing for Advertising Art (2-4) Credit: 3

This course covers the fundamentals of various graphic techniques. Instruction is given in the classification of printing methods, composition, copy and art preparation, paper selection, type and letter styles and usage, trademarks, and handlettering.

Graphic Media

(2-4) Credit: 3

This introductory course covers the fundamentals and creative experimentation in etching, serigraphy, and other printmaking media.

Oil Techniques

(2-4) Credit: 3

This course is an introduction to the techniques and materials of oil painting.

ART. 2303 Advanced Oil Painting

(2-4) Credit: 3

This course is a continued exploration of the medium with emphasis on individual expression. Prerequisite: ART.2302.

ART. 2304 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.

ART. 2305 Advertising Art I

(2-4) Credit: 3

This course is an introduction to the basic processes and techniques of advertising art. The materials and techniques of layout and commercial design are covered.

ART. 2306 Advertising Art II

(2-4) Credit: 3

This course is an advanced study of advertising art and production. It continues the principles covered in Advertising Art. Prerequisite: ART 2305.

ART. 2307 Pen & Ink Techniques

(2-4) Credit: 3

This drawing course is a study of the potentials of the medium and special attention is given to the study of the illusion of form, texture, and value.

ART. 2308 Color Composition

(2-4) Credit: 3

This course covers the theory of color and form involving definite technical procedures in properties of color theory, and its application to painting.

ART. 2309 Ceramics I

(2-4) Credit: 3

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

ART. 2310 Ceramics II

(2-4) Credit: 3

This course is a continuation of techniques of pottery making. Prerequisite: ART. 2309.

ART. 2311 Fiberarts I

(2-4) Credit: 3

This course involves a study of weaving, rug making, dying, and papermaking. Émphasis will vary from one semester to another.

ART. 2312 Fiberarts II

(2-4) Credit: 3

This course is a continuation of ART. 2311. Emphasis will vary from semester to semester.

ART. 2313 Jewelry and Lapidary I

(2-4) Credit: 3

This course is an introduction to jewelry making techniques. Direct metal working techniques are stressed. Instruction is given in the basics of cutting, grinding, and polishing gemstones.

ART. 2314 | Jewelry and Lapidary II

(2-4) Credit: 3

This course is a continuation of jewelry making techniques. Instruction is given in the lost wax method of metal forming and in creative methods of gemstone finishing. Prerequisite: ART. 2313.

### Astronomy (ASTR)

ASTR 1301 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 used in laboratory work.

ASTR 1302 Descriptive Astronomy

(3-0) Credit: 3

A non-mathematical approach to the analysis of star light, stellar characteristics, stellar evolution, the sun, galactic characteristics, cosmology are included. Planetarium and observatory used in laboratory work.

# **Automotive Body Repair (ATBR)**

ATBR 1401 Shop Practices

(3-3) Credit: 4

A course designed to provide the student with basic auto body skills involving safety, lifting devices, measuring tools, fasteners, hand and power tool use.

ATBR 1402 Body and Frame Construction

(2-4) Credit: 4

A course designed to provide an understanding of body frame construction of both conventional and unit bodies. Special emphasis will be placed on repair equipment and procedures to diagnose, repair and align collision-damaged parts. Corequisite: ATBR 1401.

ATBR 1403 Roughing and Alignment

(2-4) Credit: 4

A course designed to provide an understanding of roughing and shaping procedures on automotive sheet metal necessary to make satisfactory body repairs with special emphasis on alignment of component parts such as hoods, doors, fenders, McPherson Strut, etc. Prerequisite or corequisite: ATBR 1401, ATBR 1402.

ATBR 1404 Frame Repair & Alignment

(2-4) Credit: 4

A course 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. Prerequisite: ATBR 1401, ATBR 1402.

ATBR 1405 Auto Body Welding

(2-4) Credit: 4

A course designed to provide the student with a working knowledge of gas, arc and spot welding as they relate to auto body repair procedures. Special emphasis will be placed on cutting, bending, shrinking and welding on various types and sizes of metal.

ATBR 1406 Body Panel Repair, Replacement Finishing (2-4) Credit: 4
This course places heavy emphasis on straightening and fitting panels as required and employs welding, dinging, bumping, peening procedures; the use of body fillers, contour finishing and metal preparation are also included. Prerequisite: ATBR 1405, ATBR 1401, ATBR 1402, ATBR 1403.

ATBR 2400 Major Vehicle Damage Repair

(2-4) Credit: 4

This course is a continuation of ATBR 1406 and places emphasis on developing the skills involved in major vehicle damage repairs utilizing the latest techniques and equipment. Prerequisite: All first year courses.

ATBR 2402 Glass, Electrical & Power Accessory Service (2-4) Credit: 4
A course designed to provide the student with a knowledge of all types of glass and weathersealing devices and service, and various types of power assist and minor electrical repair. Prerequisite: ATBR 1403.

ATBR 2403 Painting & Refinishing

(2-4) Credit: 4

A course designed to provide a working knowledge of the sanding, masking, cleaning and preparation of material to be painted, the proper use of the paint gun, pattern settings, spraying techniques and the use of exotic paint materials. The course also includes paint problems such as blistering, wrinkling, bleeding and blushing. Prerequisite: ATBR 1406.

ATBR 2405 Management & Estimating

(3-3) Credit: 4

A course designed to provide the student with the experience of body shop management as it pertains to facilities, personnel, cost accounting, purchasing and stocking of supplies. The student will also receive instructions in collision repair estimating and the use of flat-rate and material manuals. This is to be taken the final semester before graduation. Prerequisite: Approval of the Department Manager.

### Automotive Service and Repair (AUTO)

AUTO 1150 Auto Maintenance

(0.3-1) Credit: 1

Procedures (Elec & Body)

Designed to teach the students to perform maintenance and troubleshooting on the electrical systems and body maintenance.

AUTO 1151 Auto Maintenance Procedures (Brakes)

(0.3-1) Credit: 1

Provide the students with the knowledge and skills to maintain and troubleshoot the brake system as detailed in the service manual.

AUTO 1152 Track Vehicle Mechanics (M113 Auto) (.5-4) Credit: 1 Course is designed to teach track system mechanics the skills necessary to perform organizational maintenance on the M113 series vehicles and operation/troubleshooting on the M578.

AUTO 1153 Track Vehicle Mechanics (M109 Automotive)

(.5-4) Credit: 1

Course is designed to teach track system mechanics the skills necessary to perform organizational maintenance on the automotive portion of the M109 Howitzer.

# AUTO 1157 Auto Maintenance Procedures (Engine)

Course is designed to teach organizational maintenance on wheel vehicles ¼ ton, 1¼ ton, 2½ ton, and 5 ton. Includes safety, test equipment and fundamentals.

AUTO 1250 Track Vehicle Mechanics (TVMC) (1.3-4) Credit: 2
To prepare service members assigned duties as unit track vehicle mechanics to maintain track vehicles in the prescribed state of readiness.

AUTO 1251 Wheel Vehicle Mechanics (WVMC) (1-4) Credit: 2 This course is designed to give soldiers assigned as wheel vehicle mechanics the knowledge to maintain wheel vehicles in the prescribed state of readiness.

AUTO 1252 Track Vehicle Mechanics (TVMC) (1.3-4) Credit: 2 To prepare service members assigned duties as unit track vehicle mechanics to maintain organic track vehicles in the prescribed state of readiness.

AUTO 1253 Operational Maintenance Course (.5-2) Credit: 2 Course is designed to teach vehicle operators to perform maintenance and operate the M809 series 5-ton and unit generators.

AUTO 1254 Operators Training & Maintenance (2-2) Credit:2 This course is designed to teach operators proper operation of vehicles and maintenance of vehicles, includes forms, safety, accident forms, PMCS, and use of Publications. Includes NSC Defensive Driving.

AUTO 1255 Motor Sergeant's Maintenance Management

Management
Provides training in procedures and techniques of establishing, conducting, and evaluating

(0.3-1) Credit: 1

(1.5-1)

Credit: 2

standard maintenance programs for unit vehicles. Includes maintenance operations, organization management, controls, requirements, training and records.

AUTO 1400 Shop Practices & Safety (2-4) Credit: 4
A course designed to provide the student with basic automotive skills involving shop safety, automotive lifting devices, use of shop and flat rate manuals, measuring devices, fasteners, hand and power tool use, thread repair, soldering, automotive terminology, cleaning methods, and the basic nine systems of the automobile.

# AUTO 1401 Internal Combustion Engine (2-4) Credit: 4 Fundamentals

This course is designed to provide the student with a knowledge of the internal combustion engine including the types, engine nomenclature, basic minor tune-up, pre-tear down diagnosis and engine removal procedures. Valve train service and valve grinding operations are also included. Prerequisite or corequisite: AUTO 1400.

AUTO 1402 Automotive Electrical Systems (2-4) Credit: 4
This course is designed to provide the student with a working knowledge of basic automotive electricity, including Ohm's Law, wiring and wiring service, wiring diagrams, lighting circuits, magnetism, electrical accessory service, and the use of basic electrical test instruments. Prerequisite or corequisite: AUTO 1400.

AUTO 1403 Internal Combustion Engine Service (2-4) Credit: 4
This course covers a brief review of combustion engine fundamentals. Work experience in valve train service, engine disassembly, repair and replacement of pistons, rings, crankshafts, camshafts, timing gears and chains, lubrication and cooling system service, and engine rebuilding procedures are included in this course. Prerequisite: AUTO 1401.

AUTO 1404 Fuel Systems (2-4) Credit: 4
A course designed to provide an understanding of the theory, fundamentals of operation, and construction of the various types of carburetors, fuel pumps, and components of the fuel system, using established procedures, measuring tools, hand tools, and special testing

equipment for testing and adjusting overhauled carburetors. Prerequisite or corequisite: AUTO 1400.

AUTO 1405 Automotive Air Conditioning (2-4) 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 re-charging and compressor service. Prerequisite or corequisite: AUTO 1400.

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 tuneups. Emphasis will be placed upon the procedures to diagnose, adjust, and replace electrical, carburetors, and ignition system components.

AUTO 1407 Brake Systems

(2-4) 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, shoe grinder, bleeder, and other equipment necessary to effect brake repairs will be taught, with emphasis on power brake and dual braking systems. Prerequisite or corequisite: AUTO 1400.

AUTO 2150 GOER Vehicle Maintenance

(.7-4.3) Credit: 1

Course is designed to teach vehicle mechanics how to perform organizational maintenance on the GOER family of vehicles.

AUTO 2251 Power Generator Mechanics Course (1.5-4.5) Credit: 2 Course is designed to teach wheel vehicle mechanics the skills necessary to perform organizational maintenance on power generators. 1.5KW through 10KW.

AUTO 2250 Operational Maintenance

(.5-2) Credit: 2

To familiarize the student with basic theories and principles of operational maintenance of military vehicles.

**AUTO 2350 Auto Maintenance Procedures** 

(1-4) Credit: 3

Maintenance and troubleshooting the engine, electrical system, transmission, power transfer, propeller shafts, brakes, steering and suspension, and winch as in the service manual.

## AUTO 2401 Standard Transmissions and Differentials

(2-4) Gredit: 4

A course designed to provide an understanding of the function, construction, operation, and maintenance of manual shift transmissions, clutches, drive lines, and differentials. Prerequisite or corequisite: AUTO 1400.

AUTO 2402 Shop Organization and 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 lay-out, general business practices and in the use of time, rate, and parts manuals. This course places special emphasis on established business principles and preparations for employment. Prerequisite: Sophomore standing.

AUTO 2403 Automatic Transmissons

(2-4) Credit: 4

A study of the theory of operation, construction, and maintenance of fluid couplings and various automatic transmissions used in the modern automobile. This course emphasizes diagnostic repair and overhaul techniques applied on live units. Prerequisite: AUTO 2401.

AUTO 2404 Ignition, Starting, and Charging Systems (2-4) Credit: 4
This course covers a review of automotive electrical systems, starting motor operations and service, charging system theory and service, ignition system theory and service including conventional and transistor systems and engine operating principles. Prerequisite: AUTO 1402.

AUTO 2405 Steering & Suspension Systems (2-4) Credit: 4

A course 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, wheels, tires, steering gears, and linkages, wheel alignment factors, diagnosis repair and alignment procedures on live automobiles. Prerequisite or corequisite: AUTO 1400.

AUTO 2406 Engine Diagnosis and Emission Control (2-4) Credit: 4 A course designed to provide an understanding of engine trouble-shooting procedures, utilizing the oscilloscope analyzer and the theory of operation, adjustment, diagnosis, and repair of all types of emission control devices. Prerequisites: AUTO 1400, AUTO 1401, AUTO 1402, AUTO 1403 AUTO 1404, AUTO 2404.

AUTO 2407 Automotive Diesel Applications (2-4) Credit: 4
This course is designed to cover preventative maintenance procedures of the principle automotive systems including the engine, ignition, fuel, electrical, brake, and steering systems.

#### Aviation Maintenance Technology (AVMT)

#### AVMT 1301 Maintenance Publications - G

(2-2) Credit: 3

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

#### AVMT 1302 Weight & Balance - G

(2-2) Credit: 3

Since weight and balance of an 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 and basic ground operations and servicing of aircraft to include starting, moving, securing aircraft and other service procedures.

#### AVMT 1303 Aircraft Drafting - G

(2-2) Credit: 3

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 1304 Airframe Materials & Corrosion Control - G(2-2) Credit: 3 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 non-destructive testing methods; performing penetrant, chemical etching and magnetic particle inspections; performing basic heat-breaking 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 circuits 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, inspection, repairing and applying materials from fabric to fiberglass. In addition, painting, doping, applying trim and letters to the airframe of an aircraft are included.

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

AVMT 2305 Aircraft Instruments Systems - A (2-4) Credit: 3

This course is designed to instruct the student in the repair, inspecting, servicing, and installation of heading, speed, altitude, time, attitude, 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.

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AVMT 2306 Engine Electrical Systems - P Credit: 3 (2-4)

This course is designed to give instruction in the trouble shooting, 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.

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

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, shock 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)

This course is designed to prepare the student to perform inspection, maintenance, and repair of aircraft electrical systems, including wiring, controls, switches, and indicators both involved with alternating and direct current circuits. Also covered is the inspection and repair of the aircraft position and warning systems. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

#### Powerplant Maintenance Reciprocating AVMT 2404 (2-6)Credit: 4 Engines - P

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 (G) Aviation Maintenance Technology courses.

Engine Fuel Systems - P AVMT 2405

(2-8)Credit: 4

This course covers the inspection, repair, servicing, and trouble shooting of fuel metering systems, fuel systems 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 trouble shooting of propeller synchronizing and ice controls, propeller control systems, fixed pitch, constant speed and propeller feathering and governing systems, removal and installation of propellers, balancing propellers and identifying and selecting proper propeller lubricants. Prerequisite: Successful completion of the general Aviation Maintenance Technology courses.

#### AVMT 2407 Powerplant Maintenance - Turbine (2-6) Credit: 4 Engines - P

This course is designed to prepare the student in maintaining, repairing, rigging, overhauling and inspecting turbine engines. Prerequisite: Successful completion of the general (G) Aviation Maintenance Technology courses.

### Aviation Technology

(See Career Pilot)

### Banking

(See Mid-Management)

#### Behavioral Science

(See Psychology)

#### Biology (BIOL)

BIOL 1301 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, an introduction to genetics, evolution and ecology. (This course may be offered via television).

General Biology I BIOL 1401

(3-3)Credit: 4

Fundamental principles of living organisms, including chemical and physical properties of life, tissue organization and function, cellular processes, and genetics. Audio tutorial method of instruction.

BIOL 1402 General Biology II

(3-3)

Fundamental concepts and mechanisms of the organ systems of both plants and animals. Includes ecology, adaptation, natural selection, and classification. Audio tutorial method of instruction.

BIOL 1405 Human Anatomy

(3-3)Credit: 4

Basic human anatomy designed for nursing and pre-med students. Laboratory includes anatomical models and displays, audio-visual materials, experiments, and taped instructional materials.

BIOL 1406 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 1405.

Field Biology BIOL 2301

(2-3)

A course designed to introduce the student to the concepts and techniques of field ecology and field problems as applied to living communities. The laboratory will include instrumentation, measurements, and analysis of populations.

BIOL 2303 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 1401 and 1402 or consent of the instructor.

Invertebrate Zoology

Classification, anatomy, physiology, and ecology of the invertebrates. Dissection and identification of structures are included in the laboratory. Field trips for the collection of invertebrates are required at minimal student expense. Prerequiste: BIOL 1401 or 1402 or consent of the instructor.

BIOL 2402 Vertebrate Zoology (3-3)

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 1401, 1402, or consent of the instructor.

Microbiology BIOL 2404

Credit: 4 (3-3)

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 pre-med students.

### **Business (BUSS)**

**BUSS 1301 Introduction to Business** 

(3-0) Credit: 3

Provides overall picture of business operations; includes analysis of specialized fields within business organizations; identifies role of business in modern society.

**Consumer Economics** BUSS 1302

(3-0)Credit: 3

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

BUSS 2301 Principles of Economics I

(3-0)

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. (Macroeconomics)

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BUSS 2302 Principles of Economics II

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; foreign economic policy. (Microeconomics).

**BUSS 2306 Personal Finance** 

(3**-0**)

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

### Career Pilot (CAPI)

CAPI 1300 Basic Flight

(.8-2.8) Credit: 3

Flight training for completion of the Private Pilot Certificate. A minimum of 57 hours of instruction is provided, including 25 hours of dual flight, of which two hours will be in the simulator, 20 hours of solo flight and 12 hours of oral instruction and briefings. The instruction in the course more than meets the requirements for a Private Pilot Certificate. Prerequisite: CAPI 1303, or concurrent enrollment.

CAPI 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.

CAPI 1302 Propulsion Systems

Credit: 3 (3-0)

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.

CAPI 1303 Air Navigation

(3-0)

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

CAPI 1304 Intermediate Flight

(.8-3.1)

First phase of Commercial Pilot training. A minimum of 63 hours of instruction is provided, including 15 hours of dual, of which 2 hours will be in the simulator. Thirty-five hours of solo flight and thirteen hours of oral instruction and briefings.

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: CAPI 1303.

CAPI 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 safe flying.

CAPI 2300 Commercial Aviation

(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: CAPI 1305.

CAPI 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.

CAPI 2302 Turbine Engines

(3-0) Credit: 3

Gas Turbine (or Jet) Engines have had a tremendous growth and refinement in the aircraft industry. Aircraft Jet Engine theory is presented, as well as the simplified mathematical relationship which is an integral part of any study dealing with Jet Engine theory. Fuel metering is a critical factor in correct engine operation and encompasses an in-depth study. Related systems and performance factors are included.

CAPI 2303 Air Transportation

(3-0) Credit: 3

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

CAPI 2304 Advanced Flight

(.9-3.4) Credit: 3

Commercial and instrument flight training. A minimum of 69 hours of instruction is provided, including 20 hours of dual instruction with 4 hours in the simulator, 35 hours of solo, and 14 hours of oral briefings. Prerequisites: CAPI 1304 and CAPI 2300, or concurrent enrollment.

CAPI 2305 Commercial Flight

(.8-3.1) Credit: 3

Commercial and instrument flight training to prepare the student for the FAA Commercial Pilot Certificate with Instrument Rating. A minimum of 63 hours of instruction is provided, including 30 hours of dual flight, of which 5 hours will be in the simulator. Twenty hours of solo flight and thirteen hours of oral instruction and briefings. Prerequisites: CAPI 2304 and CAPI 2307, or concurrent enrollment.

CAPI 2306 Multi-Engine Flight

(.8-.8) Credit: 3

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 24 hours of instruction is provided, including 12 hours of dual flight, and 12 hours of oral instruction and briefings. Prerequisite: CAPI 2305 or a Commercial Pilot Certificate.

CAPI 2307 Aviation Radio System

(3-0) Credit: 3

Basic radio fundamentals as used by the pilot. A description and practical use of various radio aids to 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 the radio navigation, including the use of the Flight Information Manual and ATC procedures. Prerequisite: CAPI 2300.

CAPI 2308 Instructor Rating

(2.5-1.6) Credit: 3

This flight course prepares the experienced pilot for the FAA Certified Flight Instructor Certificate for airplane. Includes 25 hours of dual flight and 40 hours of oral instruction and briefings. Prerequisite: Commercial Pilot Certificate.

CAPI 2309 Airline Transport Pilot

(1,7-1.7) Credit: 3

The Airline Transport Pilot Rating is the most comprehensive rating issued by the Federal Aviation Administration. Flight and ground training to qualify for the instruction is provided, which includes 25 hours of dual flight, two flight hours for the FAA Check Flight, and 27 hours of oral instruction and briefings. Prerequisites: First Class FAA Medical Certificate; Age 23; 1,500 hours of approved flight time; and Instrument Rating.

CAPI 2310 Commercial Transition Flight I (.8-3.1) Credit: 3

This is the first half of two courses to transition Commercial Rotorcraft Helicopter Pilots to

This is the first half of two courses to transition Commercial Rotorcraft Helicopter Pilots to Commercial Airplane Single Engine Land Rated Pilots. The course covers 63 hours of instruction which includes 20 hours of dual flight with one hour in the simulator, 30 hours of solo flight, and 13 hours of oral instruction and briefings. Prerequisites: FAA Commercial Rotorcraft Helicopter Rating, Class II FAA Medical and CAPI 2300 or concurrent enrollment.

CAPI 2311 Commercial Transition Flight II (.8-3.1) Credit: 3
A continuation of Commercial Transition Flight I to complete the requirements for a
Commercial Single Engine Land Aircraft Rating. The course consists of 63 hours of
instruction, which includes 30 hours of dual flight, of which 5 will be in the simulator and 5
hours in a complex aircraft; 20 hours of solo flight with 5 hours in a complex aircraft, and 13
hours of oral instruction and briefings. Prerequisite: CAPI 2310.

CAPI 2312 Instrument Flight Instructor (1.4-1.4) Credit: 3

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. A minimum of 44 hours of instruction is provided, including 20 hours of dual flight and two hours of FAA check flight and 22 hours of oral instruction and briefings. Prerequisite: Certified Flight Instructor Certificate and Instrument Rating.

CAPI 2313 Multi-Engine Flight Instructor (1.4-1.4) Credit: 3

This course is designed to prepare an applicant for the FAA Multi-Engine Flight Instructor Flight Test. A minimum of 40 hours of instruction is provided, including 20 hours of dual flight instruction, two hours for the FAA check flight and 22 hours of oral instruction and briefings. Prerequisites: FAA Multi-Engine Rating and FAA Flight Instructor Single—Engine Land Rating.

CAPI 2314 Commercial Helicopter Rating (.9-3.2) Credit:

Additional Category Commercial Helicopter Rating Course. A minimum of 66 hours of instruction is provided, including 30 hours of dual instruction, 20 hours solo, and 15 hours oral instruction and briefings; and one hour for the FAA check flight. Prerequisite: FAA Commercial Pilot Rating Single-Engine Land.

CAPI 2315 Helicopter Instructor Rating (2.5-1.6) Credit: 3
This course prepares a pilot that is helicopter rated for the FAA Certified Flight Instructor
Certificate for helicopter. This course includes 40 hours of ground training and 25 hours of
instructor training, which involves 20 hours of dual flight in a helicopter, and 5 hours of
practice ground instruction by the student. Prerequisite: Commercial Pilot Certificate with a
helicopter category rating.

### Chemistry (CHEM)

CHEM 1401, 1402 General Chemistry I & II (3-4) Credit: 4, 4

A thorough study of the modern concepts and fundamental principles of chemistry. Quantitative experiments are stressed during the first semester of laboratory and the qualitative analysis of the common cations and anions and an introduction to quantitative analysis is studied in the second semester laboratory. The course is designed for science majors and minors. The course includes three hours lecture, one hour recitation, and three hours of laboratory per week. Prerequisite: Two years of high school algebra and MATH 1302, or consent of instructor. CHEM 1402 has a prerequisite of CHEM 1401.

CHEM 1404 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 2401, 2402 Organic Chemistry I & II (3-4) Credit: 4, 4
This course provides a thorough foundation in organic chemistry. A mechanistic approach is utilized in an integrated study of aliphatic and aromatic compounds. Extensive use is made of mechanisms and chemical bonding descriptions. Absorption spectra and mass spectra of organic compounds are studied. The course is designed for science majors and minors. Prerequisite: CHEM 1401, 1402, or consent of the instructor. CHEM 2402 has a prerequisite of CHEM 2401.

CHEM 2403 Quantitative Analysis (3-4) Credit: 4
This is the study of the theory and practice of chemical analysis. The study of errors is introduced. Simple instrumental methods of analysis are introduced. The course is intended for science majors and minors and medical technology majors. The course includes two hours

of lecture, one hour of recitation, and four hours of laboratory per week.

CHEM 2404 Introductory to Organic and
Physiological Chemistry

(3-3) Credit: 4

A study of organic and biochemistry for nursing students and other students interested in the processes of life. Basic principles, nomenclature, principal reactions and methods of synthesis and the major classes of carbon compounds and chemically important compounds. Prerequisite course CHEM 1404.

### Child Development (CHDV)

CHDV 1301 Introduction to Child Development (3-0) 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 1302 Infant and Toddler Care

(2-2) Credit: 3

This course emphasizes the skills required to care for children from birth to three years of age. It shows how the relationship of the primary caregiver to the child influences the physical, emotional, social, and cognitive development of the child. It will also include a study of the infant during the neonatal period and birth, infant stimulation, and the years of the turbulent toddler.

CHDV 1304 Developmental Language

(2-2) Credit: 3

The objective of this course is to provide the student the knowledge and skills to develop the language ability of young children. Practical experiences are gained in teaching language activities in a child care center. Emphasis is placed on developing special materials and techniques for bilingual and multi-cultural children.

CHDV 1305 Instructional Aids

(2-2) Credit: 3

This course is designed to instruct child care personnel and teacher's 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 & Disorders in Children

(2-2) Credit: 3

Normal motor development and techniques for screening young children for motor skills development. Methods and materials 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 for assisting children with emotional disabilities.

CHDV 1401 Learning Programs

(2-4) Credit: 4

This course covers methods of planning, working with young children for opportunities in the child's active participation, experimentation and problem solving using materials to provide the greatest scope of experience and learning.

CHDV 1403 Creative Expression

(2-4) Credit: 4

Creative activities, both structured and unstructured, in arts, crafts, music, dance, literature, storytelling, dramatic play and recreational play, are covered in this course. Practical experiences are gained by working with the young in a child care center.

CHDV 2301 The Exceptional Child

(2-2) Credit: 3

This course is designed to provide a basic knowledge of the child with behavioral problems. The special problems of mental retardation and conditions such as autism are included. Practical experiences at a child care center will cover etiology, diagnosis, characteristics and the daily and long-term management of the exceptional child. Prerequisite: CHDV 1301.

CHDV 2302 Parent-Child Relationships

(3-0) Credit: 3

This course is a study in parent-child experiences and responsibilities and how they affect child behavior and development. Emphasis placed on experiences to stimulate a positive identification for family and self-concept, through thinking and reasoning skills and a positive attitude toward behavior management at each age and stage of development. Included is a study of the abused and neglected child.

CHDV 2401 Pre-School Center Management

(2-4) Credit: 4

This course covers the theoretical and practical aspects of managing a pre-school center. The main emphasis is placed on developing a management system for a pre-school center that would include budgeting, record keeping, nutrition, health, safety, referral services and personnel practices, including employer/employee relations. Prerequisite: Sophomore standing in the Child Development program.

CHDV 2601 Learning Theories Seminar & Practicum (1-15) Credit: 6 This course includes on-the-job experiences with opportunities for direct involvement in an approved program activity for the child development major. In addition to the practicum, seminar time is spent with community resource persons. Prerequisite: Sophomore standing in the Child Development program.

CHDV 2602 Special Projects

(1-15) Credit: 6

This course is designed to allow the advanced Child Development student the opportunity to undertake a project that involves working with pre-school age children. The area of specialization would be selected and performed under the supervision of the instructor. Prerequisite: Sophomore standing in the Child Development program.

#### Communications

(See English)

### Communications Electronics Technology (ELTE)

#### ELTE 1150 Power Generator Maintenance

(1-2) Credit: 1

This course will provide the student with proper maintenance skills to accomplish required periodic maintenance.

#### ELTE 1151 Radio Maintenance Procedures

(1-3) Credit: 1

This course is designed to provide technical knowledge of servicing and repair of Tactical Radio Sets, AN/PRR-9, AN/PRT-4(A) Radio Sets. {Helmet Radios}

#### ELTE 1301 Technical Mathematics I

(3-0) Credit: 3

A study of the basic concepts of math and algebra and the use of the electronic calculator in problem solving.

#### ELTE 1302 Technical Mathematics II

[3-0] Credit: 3

A study in the solution of trigonometric problems through the use of tables, and the electronic calculator. Prerequisite: ELTE 1301.

#### 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 includes coverage of DC topics such as elementary physics, Ohms law, series and parallel resistive networks, and a power formula; and AC topics such as power generation, inductive and capacitive, waveform types, and voltage measurements. It also includes the study and use of analog and digital multimeters, power supplies, and an introduction to the oscilloscope and AC generator.

#### **ELTE 1402** Electrical Circuits II

(3-3) Credit: 4

The second course in the study of electrical circuitry. This course includes alternating current topics such as single and polyphase systems, impedance calculations, resonant circuits, transformers, and an in-depth study of the use of the triggered-sweep oscilloscope. Prerequisite: ELTE 1401.

#### **ELTE 1403 Electronics Circuits I**

(3-3) Credit: 4

A study of the active electronic devices (ie. diodes, transistors, etc.) and their more common circuit applications. This course covers circuit design methods of simple power supplies, amplifiers, relaxation oscillators, 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 1501 Basic Electricity for Electronics

(4-3) Credit: 5

A study of the elementary principles of electricity including voltage, current, resistance, power, magnetism, Ohm's Law, power formulas as related to complex series, parallel, and series-parallel circuits and the use of Kirchoff's Law and Thevenin and Norton's theorems in their analysis. Also covered will be an introduction to inductance, inductive reactance, capacitance, capacitive reactance as applied to simple series and parallel circuits. Mathematic topics covered will include decimals, fractions, scientific notation, roots, powers, exponents, simultaneous equations, powers of ten, percentages and an introduction to trigonomentry.

ELTE 1503 Advanced Electricity for Electronics (4-3) Credit: 5

A study of AC circuits containing inductive and capacitive reactance combined with resistance for single and polyphase sources and the application of laws and theorems for solving these complex circuits. Math topics covered in this course include trigonometry, efficiencies, impedance matching, inductive and capacitive reactance, Pythagorean theorem, resonant circuits, power factors, logarithmic and mathematical tables. Prerequisite: ELTE 1501.

**ELTE 2250 Tactical Communications** 

(1-4) Credit: 2

This course is designed to provide training and career development for the tactical communications systems operator/mechanic (MOS 31V) on specific communications equipment and components.

ELTE 2251 Field Radio Repairer Course MOS 31E (1-4) Credit: 2 This course is designed to provide basic refresher training in Field Radio Repair and Maintenance at the organizational level, and to introduce new equipment and test and repair procedures.

ELTE 2301 Broadcast Equipment Maintenance (1-6) Credit: 3
The operation preventive maintenance procedures and trouble-shooting of modern day

The operation, preventive maintenance procedures, and trouble-shooting 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. Prerequisite: ELTE 1404 and the approval of the Departmental Manager.

ELTE 2350 Tactical Communication Chief

(2.5-4.7) Credit: 3

To assist E-4 through E-6 grade service members in the 31V MOS to understand the responsibilities of a Tactical Communications Chief which include the proficient operation and supervision of radio and wire communication programs.

ELTE 2402 Advanced Test Equipment

(3-3) Credit: 4

The use and calibration of Test Equipment used in servicing complex electronic hardware. Observation of waveforms of electronic apparatus. Prerequisite: ELTE 2404.

ELTE 2403 Special Intensive Study

(1-9) Credit: 4

An intensive study in the design, theory of operation, and construction techniques used in a field which holds special interest to the student and is in the field of his major. A student obtaining a second or third degree, must repeat the course with the 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. Prerequisite: Approval of the Department Manager.

**ELTE 2404** Electronic Circuits II

(3-3) Credit: 4

A continuation of the study of active circuits. This course covers the design of audio amplifiers, power supply regulation, R.F. amplifiers, sine wave oscillators, relaxation oscillators, mixer circuits, and modular circuits. Prerequisite: ELTE 1403.

**ELTE 2406** Integrated Devices

(3-3) Credit: 4

An advanced study of the many types of IC's in use today. The course will include digital, linear, and LED type devices. Course will also include application and application design. Prerequisite: ELTE 1403.

**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. Prerequisite: ELTE 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 2404.

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 and ELTE 2404.

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.

### Computer Electronics Technology (CMET)

CMET 1400 Electronics & Computer Skills (2-4) Cred

A study of modern electronic construction techniques, including the use of hand tools and fabrication equipment. The course will also include an introduction to basic computer hardware and programming.

CMET 1401 Digital Circuits

(3-3) Credit: 4

A review 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-flop, registers, and counter circuits. The course also covers numbering systems, arithmetical circuitry, and elements of control circuits.

CMET 1403 Computer Systems & Operational (3-3) Credit: 4
Programming

The study of the theory of the operation of several computer systems, to include instructions, an introduction to their logic diagrams, and circuit schematic, 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.

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 2401 Microprocessors and Microcomputers (3-3) Credit: 4
A study of modern day microcomputer techniques includes eight and sixteen bit machines.
Both the S-100 and 6800 bus structure will be studied as well as the use of emulation in the design and repair of a microcomputer system. Prerequisite: CMET 2402.

CMET 2402 Computer Circuit Analysis

(3-3) Credit: 4

A comprehensive study of the clock and pulse generation circuit, wave-shaping circuits, trigger and control circuits, and synchronization and counting circuits, as well as other circuits used in modern-day computer. Prerequisites: CMET 1401 and CMET 1403.

CMET 2403 Peripherals & Interfacing

(3-3) Credit:

The study of selected machine and peripheral interface techniques, to include mag tape and disk, paper tape, CTR, and printer. Prerequisites: CMET 2402 and ELTE 2404.

CMET 2404 Computer System: Diagnosis & Maintenance (3-3) Credit: 4
The operation, preventive maintenance procedures, and troubleshooting of modern-day computer equipment, to include the study of advanced diagnostic programming, including the finding, documenting, and repairing of 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 fluidic and pneumatic systems used in robotic and tendon type systems, as well as the study of DC and AC motors and motor control for movement, and positioning. Prerequisite: CMET 1404.

CMET 2406 Robotic Implementation (3-3) Credit: 4

A study in data acquisition, handling, and conversion for use in movement, detection, and voice synthesis in advanced robotic systems. Prerequisite: CMET 2405.

### Computer Science (COSC)

COSC 1300 Computers & Society (3-0) Credit: 3

A non-technical survey course, intended for non-computer science majors, which studies the role that computers play in our society. The purpose is to give a basic, general, and accurate picture of what computers are, do and can do, and to lay to rest myths and mystiques concerning computers. The effects the computers have had and are having on society are studied and used to project what effect they may have in the future. An introduction to data representation flow-charting and computer program logic is presented to the non-computer science major to write a simple computer program.

COSC 1301 Data Entry/Keypunch

(2-3) Credit: 3

Introduction to keypunching is designed to train beginning keypunch operators. Keypunching, verifying, and program card design are covered. Drills will develop accuracy and speed. Prerequisite: Typing speed of 30 wpm.

COSC 1302 Data Entry/Terminal

(2-3)Credit: 3

A course designed to train terminal data entry operators. Actual on-the-job type data entry will be performed by the student using on-line video display terminals. Accuracy and speed are stressed. Also covered are different types of data entry systems and the design of source documents and screen formats. Prerequisite: Typing speed of 30 wpm.

Computer Center Operations

(3-0) Credit: 3

This course covers operational theories, concepts, and terminology that is necessary for an understanding of how software and hardware interface together to provide a total system. Modern computer center workflow and throughput are emphasized in the course. Prerequisite: COSC 1401. Corequisite: COSC 1406.

COSC 1306 Introduction to BASIC (2-3) Credit: 3

Offers an introduction to the basic concepts and constructs of programming in BASIC for the student interested in using a computer at home or in a small business or as a tool in a subject area such as math or science. Applications will illustrate personal computing techniques.

COSC 1307 **Introduction to Computer Concepts** (3-0) Credit: 3 An overview of applications of computers. The course describes major computer system components; stresses the process of information system development, strength and limitations of the application of computer technology, and the relationship between the user of computer and information systems with the technical specialist.

COSC 1401 Introduction to Computer **Operations & Library Management**  (3-3) Credit: 4

This course is designed to provide the student with knowledge and reponsibilities of a computer operator and tape librarian. 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 1403 and approval of Department Manager.

COSC 1403 Introduction to Computer Science & Computer Programming

[3-3] Credit: 4

This course is intended to be the first course for Computer Science majors and no prior knowledge of computers or programming is assumed. The program language, FORTRAN, and flow-charting are introduced at the beginning of the course so that the student will have a better idea of what a computer does before investigating how it functions. Approximately half of the lectures and nearly all of the laboratories are devoted to programming and flowcharting. Programming assignments will run concurrently with other fundamental topics such as historical development of computers, typical present-day hardware and software and computer applications.

COSC 1404 COBOL Programming

(3-3)

This course is designed to provide the student with skills and fundamentals in solving business data processing problems using Full American National Standard COBOL. The student becomes effective in COBOL programming techniques involving sequential files. Table searching, control breaks, and a coverage of Indexed Sequential file handling are presented. Prerequisite: COSC 1403 or MISC 1454.

Credit: 4 Introduction to Systems Analysis (3-3)COSC 1405 Introduction to problems from business and science using logical and mathematical techniques particularly suited to characteristics of the digital computer. Problems involve qualification of descriptive data, manipulation of these data, and expression of analysis in descriptive terms. Includes documentation and flow-charting methods. Prerequisites: COSC 1403 or concurrent enrollment.

Computer Organization & Architecture (3-3) Credit: 4 COSC 1406 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. Prerequisite: COSC 1403.

COSC 1407 RPG Programming (3-3) Credit: 4

Report Program Generator, a problem oriented language involving fixed program logic, file description, input, calculation, output of practical business oriented problems on card, tape, and disk systems. Prerequisite: COSC 1403.

COSC 1408 Conversational Languages - BASIC (3-3) Credit: 4
Programming and testing sample programs written in a remote terminal-oriented language, such as BASIC, Conversational FORTRAN and APL. Prerequisite: COSC 1403 or consent of

COSC 2110 Topics in Computer Science Laboratory (0-3) Credit: 1
Laboratory for COSC 2310 when topic has a laboratory requirement. Prerequisite:
Concurrent enrollment in COSC 2310.

COSC 2301 Introduction to Computer Center Management (3-0) Credit: 3 Planning, organizing, and controlling data processing installations. Managerial aspects in the introduction and use of computer systems and management concepts. Prerequisites: 12 hours of Computer Science.

COSC 2310 Topics in Computer Science

(3-0) Credit: 3

Study of recent developments and topics of current interest in computer science. Prerequisite: 12 hours computer science or departmental approval.

COSC 2401 Advanced COBOL

Instructor.

(3-3) Credit: 4

This course is designed to offer the student of COBOL programming an in-depth study of the theory, programming techniques, and needed programming efficiencies that will be required of the prospective COBOL programmer. A 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 Sequential and Random file manipulation. Prerequisite: COSC 1404.

COSC 2402 Advanced Systems

(3-3) Credit: 4

This course is designed to provide the student of Computer Science with the skills and rudiments needed to recognize system problems and collect needed data pertaining to the system. The course is intended to provide an overview on the many current systems in the marketplace including those under development. As a minimum that will include: Information Systems, Database Management Systems, Management Information, and Decision Support Systems. Prerequisites: COSC 2401, COSC 2404.

COSC 2403 Introduction to Operating Systems & 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 a command language. Use of utilities for data set maintenance and manipulation of system control information. Prerequisites: COSC 2401 and COSC 2404.

COSC 2404 Assembler Language Programming (3-3) Credit: 4
Assembler language programming for the current college system. Programming and
debugging of business oriented problems, with emphasis on the standard and decimal
instruction set and the sequential access method. Prerequisites: COSC 1403 and COSC 1406.

COSC 2405 Advanced FORTRAN

(3-3) Credit: 4

This course is designed for the computer science major to augment his algorithmic and programming talents, and to offer the non-computer science major a thorough coverage of the FORTRAN language to employ as a tool to solve business or scientific problems. Emphasis is placed on multi-dimensional arrays, use of functions and subprograms, searching and sorting techniques, and direct access processing. Prerequisite: COSC 1403.

COSC 2407 PL/I Programming

(3-3) Credit: 4

Business and scientific computer applications are developed using PL/I. Emphasis is placed on advanced programming concepts. Prerequisites: COSC 1404 and COSC 1403.

COSC 2408 Introduction to Teleprocessing

(3-3) Credit: 4

An introduction to programming for the teleprocessing environment under CICS. Applications will be written and tested on-line. Prerequisite: COSC 2404.

COSC 2409 Field Projects

(1-9) Credit: 4

This course provides the student with an opportunity to utilize the knowledge acquired in his/her academic program by designing, planning, developing, and implementing an activity directly associated with a real computing/data processing environment. Prerequisite: Consent of Instructor.

### Consumer Electronics Technology (COES)

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 & Audio Distribution Systems (3-3) Credit:4

A two-part course consisting of a study of commercial P.A. or sound reinforcement systems, and a study of large scale T.V. "cable systems" and small scale antenna distribution systems. This course includes some "on the job" training with commercial companies. Prerequisite: ELTE 1403.

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

The operation and service 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.

### Cosmetology (COSM)

COSM 1401 Facial Specialist I

(2-4) Credit: 4

This course introduces the student to theory of facial treatments and the techniques and methods of facial massage. It also includes anatomy of the face and neck, chemistry in facials, sanitation and safety measures and professional practices. This is a 96 contact hour course.

COSM 1402 Facial Specialist II

(2-4) Credit: 4

This is a continuation of COSM 1401. It will include instruction and practice on how to recognize skin conditions and disorders. This is a 96 contact hour course. Prerequisite: COSM 1401.

COSM 1403 Facial Specialist III

(2-5) Credit: 4

This is a continuation of COSM 1402. This is a 112 contact hour course. Prerequisite: COSM 1402.

COSM 1501 Manicurist

(3-6.4) Credit: 5

This course trains the student in all facets of manicuring. It covers the anatomy of the arms and hands, the chemistry involved in manicuring, sanitation and safety methods, professional practices, equipment and procedures and techniques used by the manicurists. This is a 150.4 contact hour course.

COSM 1601 Orientation and Introduction to Cosmetology

(4-12) Credit: 6

An introductory course in the field of cosmetology. The course includes an orientation to cosmetology and the development of related skills, knowledge and attitudes necessary for a cosmetologist. Shampoos and hair and scalp treatment are covered. This is a 256 contact hour course.

COSM 1602 Basic Cosmetology

(4-12) Credit: 6

A continuation of COSM 1601. The course continues practice and discussion of shampoos and hair and scalp treatment and introduces cold waving and chemical hair relaxing. This course will develop an appreciation for safe work habits and orderly and systematic procedures for accomplishing skills and tasks required of an operator. This is a 256 contact hour course. Prerequisite: COSM 1601 or concurrent enrollment.

COSM 1603 Hair Coloring and Basic Cosmetology (4-12) Credit: 6 A continuation of COSM 1602. Hair coloring to include wigs and hairpieces, hairstyling, haircutting, and related skills are covered. This is a 256 contact hour course. Prerequisite: COSM 1602 or concurrent enrollment.

COSM 1604 Hair Styling, Manicuring and Basic Cosmetology

(4-12) Credit: 6

Instruction covers hairstyling, nail care and skin care. The students practice the basic manipulative skills required for hairstyling, the care and styling of wigs and manicuring. This is a 256 contact hour course. Prerequisite: COSM 1603 or concurrent enrollment.

COSM 1605 Facial Treatments and Basic Cosmetology

(4-12) Credit: 6

A continuation of COSM 1604. This course will also cover the theory and techniques and procedures involved in facial treatments. This is a 256 contact hour course. Prerequisite: COSM 1604 or concurrent enrollment.

COSM 1606 Preparation For The State Board & Basic Cosemetology

(4-12) Credit: 6

This course is a continuation of COSM 1605. This course will stress rules, regulations and preparation for the Texas Cosmetology Commission licensing examination. This is a 256 contact hour course, and it completes the 768 contact hour program required by Texas Cosmetology Commission. Prerequisite: COSM 1605 or concurrent enrollment.

COSM 2201 Advanced Operator Seminar

(1.5-0) Credit: 2

This course is designed to keep licensed operators abreast of new developments, trends, current major issues and legal, professional and other important factors that have an impact upon the field of cosmetology. This is a 24 contact hour course. Prerequisite: Cosmetology Operators License.

COSM 2301 Instructor Orientation

(3-0) Credit: 3

This course is an introduction to teaching cosmetology. It covers the methods and techniques used by the training instructor, and the materials equipment, various contracts, applications and examination forms used by the Texas Cosmetology Commission. The student will also learn the rules and regulations of the College, how to prepare lesson plans, how to plan class lectures and presentations, how to prepare examinations, and the student will observe class lectures presented by licensed instructors. This is a 48 contact hour course. Prerequisite: Cosmetology Operators License.

COSM 2801 Clinic Management

(8-14) Credit: 8

The student will observe all class lectures, demonstrations and practical exercises and will prepare for the first class lecture. The student is required to prepare a special cosmetology notebook with daily lesson plans. This is a 352 contact hour course. Prerequisite: COSM 2301 or concurrent enrollment.

COSM 2802 Classroom Teaching

(8-14) Credit: 8

During this course the student instructor shall conduct theory and practical classes and will prepare daily lesson plans and examinations on each lesson taught. This is a 352 contact hour course. Prerequisite: COSM 2801 or concurrent enrollment.

### Criminal Justice (CRIJ)

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. Techniques of self-defense, 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 Basic Criminal Investigation

(3-0) Credit: 3

Introduction to the fundamentals of criminal investigation, including theory and history, conduct at crime scenes, collection and preservation of evidence.

CRIJ 1303 Legal Aspects of Law Enforcement (3-0) Credit: 3 History and philosophy of modern criminal law, including the structure, definition and application of statutes and leading case law, the elements of crimes and penalties; general provisions of the Penal Code.

CRIJ 1304 Criminal Procedure & Evidence

(3-0) Credit: 3

Introduction to the rules governing the admissibility of evidence and types of evidence; criminal procedures in various courts, review of the Model Code of Criminal Procedure, including laws of arrest, search and seizure, and leading case law on each topic.

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 officer 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 Survey of Corrections

(3-0) Credit: 3

A general course describing the history and evaluation of the corrections process. Covers all aspects of institutional and community based corrections.

CRIJ 1307 Police-Community Relations

(3-0) Credit: 3

The role of the individual officer in achieving and maintaining positive public response; intergroup relations and public information.

CRIJ 1308 Police Role in Crime & Delinquency (3-0) Credit: 3
Study of deviate behavior and current criminological theories, with emphasis on police applications; crime prevention and the phenomena of crime as it relates to juveniles.

**CRIJ 1309** Police Organization and Administration (3-0) Credit: 3 Principles of organization and management as applied to law enforcement agencies; introduction to concepts of organizational behavior.

CRIJ 1310 Advanced Criminal Investigation (3-0) Credit: 3 Modern methods and skills required for criminal investigation, to include discovery methods, development and lifting of latent fingerprints; criminal scene sketches; the use of plaster and silicone rubber for reproducing evidence at 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; pre-test procedures; polygraph usage in criminal investigations; legality concerning polygraph; and avenues of a polygraphist 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 65th Texas Legislature.

CRIJ 2101 Emergency Medical Aid (1-1) Credit: 1
This course will focus 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

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 adopting a mature attitude towards firearms will be stressed at all times. The intelligent, legal, and moral use of the police firearms will be emphasized at all stages of teaching and firing.

CRIJ 2301 Probation & Parole

will be used as guidelines for this course.

(3-0) Credit: 3

Course will provide the student with some understanding of the evolution of criminal corrections and explore with the student the many avenues which the corrections field branches into. Develop in each student a basic understanding of the various methods of corrections so that they can 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: Approval of Department Manager. This course may be repeated for credit.

CRIJ 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.

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 engineering, education, and enforcement at the supervisory level.

CRIJ 2307 Penology (Jail Operation & Management) (3-0) Credit: 3

A survey of the basic concepts of penal and correctional rationale as employed by criminal justice administrators. An overview of the operation and management principles of the institutional setting will be examined in depth.

CRIJ 2308 Patrol Administration

(3-0) 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 2309 Provost Marshal Operations

(3-0) Credit: 3

The principles of organization and administration as applied to the operational system of a military Provost Marshal's office as well as that of the Inspector General's. Practical training in conduct of briefings, management, and attendant qualities of leadership, and some cases of dissident conditions which might impair role and mission of the dissident command.

CRIJ 2310 Correctional Control & 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 a correctional facility; emergency measures, prisoner privileges; and the records and reports of the detention center.

#### Dance

(See Physical Education)

### Developmental Studies (DS--)

**DSCO 0300** Developmental Communications (1-2) Credit: 3 A course offered in a laboratory setting to improve reading comprehension and 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 0300 College Study Skills

(1-2) 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.

DSMA 0300 Developmental Mathematics I

(1-2) Credit: 3

An introductory course including instruction in mathematical operations with rational numbers, the application of measurement systems to geometric problems, and an introduction to basic probability and statistics.

DSMA 0301 Developmental Mathematics II

(1-2) Credit: 3

A mathematical approach to consumer-oriented and family living problems, including budgeting, balancing a checkbook, calculating wages and payroll deductions, and completing Federal income tax forms.

DSMA 0302 Developmental Mathematics III

(1-2) Credit: 3

Developmental mathematics for technical fields, including algebra, integers, mathematical sentences, rational numbers, and polynominals.

DSRE 0300 Reading & Comprehension I

(1-2) Credit: 3

A course offered in a laboratory setting, using varied instruction techniques, designed to help students improve their proficiency in reading comprehension and rate, word recognition and vocabulary development.

DSRE 0301 Reading & Comprehension II

(1-2) Credit: 3

This course is a continuation of Reading and Comprehension I and places emphasis on further improvement of reading comprehension and rate, word recognition and vocabulary development.

DSSP 0300 Developmental Speech

(1-2) Credit: 3

An introductory course emphasizing structure and different techniques of presentation, as well as principles and methods of discussion. Designed to identify deficiencies and strengths, and to develop and improve interpersonal skills and the student's ability to communicate through effective speech.

DSWR 0300 Developmental Writing I

(1-2)Credit: 3 A course offered in a laboratory setting, using varied instructional techniques, designed to identify deficiencies and improve basic writing skills necessary for the student who intends to pursue college-level academic work.

DSWR 0301 Developmental Writing II

(1-2)Credit: 3

A course in a laboratory setting to develop the ability to locate specific types of material, interpret and summarize information, analyze data and draw conclusions, and to prepare and present the findings in written form.

DSWR 0302 Developmental Writing III

(1-2)

A course designed to extend reading, research, and writing skills. Emphasis is placed on reference materials relating to consumers, including deceptive trade practices, terms used in written contracts, and a wide variety of consumer oriented literature.

#### Diesel Maintenance

(See Diesel Mechanics)

#### Diesel Mechanics (DIEM)

DIEM 1150 GOER Operator/Organizational Maintenance (CESP 0104)

1.6-1.9) Credit: 1

This course is designed to train personnel in operator and organizational maintenance tasks for the GOER family of vehicles. Includes PMCS, familiarization and operation, and organizational maintenance tasks for the family of vehicles.

GOER Vehicle Direct Support DIEM 1250 Maintenance (CESP 0103) (1.3-3.8) Credit: 2

This course is designed to train maintenance personnel in Direct Support maintenance tasks for the GOER family of vehicles. Course is performance based, emphasizing hands-on performance tasks on the various systems of the GOER vehicles.

DIEM 1401 Diesel Engine Fundamentals

(2-4)Credit: 4

This course is designed to provide the student with a knowledge of the development, basic design, and working principles of the diesel engine. The student will receive work experience in cleaning, disassembly, inspection, and assembly of diesel engine parts. Prerequisite or Corequisite: AUTO 1400.

DIEM 1402 Diesel Engine Service

(2-4)Credit: 4

This course is designed to provide the student with a working knowledge of valve reconditioning, cylinder head and injector tube service. Prerequisite or Corequisites: AUTO 1400, DIEM 1401.

DIEM 1403 Fuel & Injector Systems (2-4)Credit: 4

A course designed to provide an understanding of the diesel fuel system. The student will receive instruction and practice in disassembling, cleaning, testing and assembly procedures of various types of injectors and pumps. Prerequsites: AUTO 1400, DIEM 1401.

Standard Transmissions & Differentials (2-4)This course will provide the student with a working knowledge in disassembly and repairing of clutches, sliding gear transmissions, transfer gear cases, drive lines and axle assemblies. The theory of torque and gear ratios will be emphasized as it applies to units of the drive train. Prerequisite: AUTO 1400.

DIEM 2400 Hydraulics & Steering Systems

(2-4) Credit: 4

This course will provide lecture and laboratory experience involving hydraulic motors, pumps and various control valves. The student will disassemble, inspect, assemble and test various hydraulic components. Emphasis will be placed upon basic control systems, pneumatic and hydraulic fluids, and power steering service and repair. Prerequisite: AUTO

DIEM 2401 Diesel Engine Auxiliary Systems

 $\{2-4\}$ 

This course is designed to provide a working knowledge of various auxiliary systems such as turbo chargers, root blowers, cooling, lubricating and air starter systems. The student will test, remove, repair and install components of the auxiliary systems. Prerequisite: AUTO 1400 and DIEM 1401 or AUTO 1401 and AUTO 1403.

DIEM 2402 Diesel Starting & Charging Systems (2-4) Credit: 4

This course will provide an understanding of the theory of operation and construction of the starting and charging systems to include starters, relays, switches, alternators, and batteries. Testing, trouble-shooting and repair of the various components will be emphasized. Prerequisite: AUTO 1400.

DIEM 2403 Diesel Engine Overhaul

(2-4) Credit: 4

This course is designed to provide the student with the knowledge to perform a complete engine overhaul on various types of diesel engines. Crankshaft, camshaft, bearing, seals, cylinder sleeves, and valve reconditioning service will be performed. Prerequisites: AUTO 1400, DIEM 1401, DIEM 1402.

DIEM 2404 Diesel Automatic Power Trains

(2-4) Credit: 4

This is a theory and laboratory course in torque converters and various automatic transmissions utilized in conjuction with diesel engine application. It will provide a working knowledge of the mechanical and hydraulic operations in the automatic transmission. Emphasis will be placed on how to clean, disassemble, inspect, service and trouble-shoot various automatic transmissions. Prerequisites: AUTO 1400, DIEM 1404.

DIEM 2405 Advanced Diesel Engine Service & Trouble-shooting

(2-4) Credit: 4

This course is designed for the student to specialize in a chosen diesel engine. All types of service and trouble-shooting will be included with special emphasis on rack adjustment, governor adjustment, and injector timing. Prerequisites: AUTO 1400 and all DIEM courses.

### Drafting and Design (DRDS)

DRDS 1302 Blueprint Reading

(2-2) Credit: 3

The fundamentals of blueprint and sketching as they apply to machine drawing.

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, dimensioning, pictorial drawings, copy reproduction, and the use of equipment essential to the field of drafting.

**DRDS 1401** Pictorial Drafting

(3-3) Credit: 4

A course mainly concerned with pictorials. Includes the theory of oblique and isometric drawings. Also covered are one and two point perspectives of shade and shadow application. Prerequisite: ENGR 1301 or concurrent enrollment.

DRDS 1402 Technical Illustration

(3-3) Credit: 4

Introduction to pictorial drawings as used in industrial catalogues, assembly sheets, newspaper publications, and promotional literature. Work to be done in various media to include pencil, ink, transfer tapes, and air brush. Prerequisites: ENGR 1301, DRDS 1401, or concurrent enrollment.

DRDS 1403 Machine Drawing

(2-4) Credit: 4

Drawings 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 1301, DRDS 1401 or concurrent enrollment.

**DRDS 1404** Structural Drafting

(2-4) Credit: 4

A study of the A.I.S.C. 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 rods. Prerequisite: ENGR 1301

DRDS 2401 Pipe Drafting

(2-4) Credit: 4

Design and detailing of pipe systems making use of standard practices and symbols; includes single line, double line, plan profile and isometric drawings of pipe systems. Prerequisite: ENGR 1301.

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. Prerequisite: ENGR 1301.

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 connection diagrams, printed circuits, control circuits, and schematic diagrams. Some review of lettering and mechanical drawing principles. Prerequisite: ENGR 1301 or approval of the Department Manager.

DRDS 2404 Principles of Design

(3-3) Gredit: 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. Prerequisites: ENGR 1301, DRDS 1401, DRDS 1402.

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. Prerequisites: ENGR 1301, ENGR 1302.

**DRDS 2406** Industrial Practice

(2-4) Credit: 4

This course is designed to give specialized practice to the student in his major field of interest. The student will complete actual jobs for area industries to gain realistic experience in his chosen career. Note: Must be taken during the last semester of the sophomore year.

DRDS 2410 Computer Aided Drafting

(2-4) Credit: 4

A course designed to introduce the computer to the student of drafting 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 standards set by industry. Prerequisite: Sophomore standing in Drafting Program.

### Earth Science (EASC)

EASC 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.

### **Electrical Construction and Maintenance (ELEC)**

**ELEC 1301 Electrical Codes** 

2-2) Greatt: 3

A study of the national codes and local ordinances related to residential and commercial wiring.

ELEC 1401 Low Voltage and Appliance Circuits

(2-4) Credit: 4

Wiring practices used in low voltages circuits such as bells, chimes and alarms and in appliance circuits, electric heating, central air conditioning, grounding practices and service entrances.

ELEC 1402 Commercial Wiring

(2-4) Credit: 4

Commercial wiring practices including materials, conduit work, wire pulling and circuits layouts.

**ELEC 1403** Control Circuits

(3-3) Credit: 4

A study of terminology, symbols and the development of control circuits diagrams; magnetic starting and overload to include individual and multiple start-stop stations with overload protection; and connecting and testing, jogging and reversing motor controls and sequencing circuits. Prerequisite: ELTE 1403.

ELEC 1404 Single and Three-Phase Transformers (3-3)

A study of the basic transformer fundamentals, the types of transformers, and the selection, connection and testing of single-phase and three-phase distribution transformers. Prerequisite: ELTE 1400.

**ELEC 2405** Motors and Motor Codes

(3-3) Credit: 4

A study of the national electric code and local ordinances related to motors; characteristics, connection and testing of DC motors and generators and single-phase and three-phase motors.

ELEC 2406 Electrical Planning (3-3) Credit: 4

Planning the placing of receptacles, switches, lights, appliances, and service entrances, and material estimating and pricing for residences. Planning the wiring for a commercial building working from blueprints and specification books.

### **Electronic Data Processing**

(See Computer Science)

## **Emergency Medical Technician (EMET)**

EMET 1401 Emergency Medical Technician (2-4) Credit: 4
The objective of this course is to provide emergency medical theory and skills training to

The objective of this course is to provide emergency medical theory and skills training to enable the student to function as an emergency medical technician and to be eligible to take the examination and become a Registered Emergency Medical Technician-Ambulance Technician.

Engineering (Civil & General) (ENGR)

ENGR 1101 Introduction to Engineering (1-0) Cr

This course introduces the student to all the engineering fields and the opportunities within the scope of professional work.

ENGR 1301 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 1302 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 1301.

ENGR 1303, 1304 Plane Surveying I & II

(2-3) Credit: 3, 3

These courses cover the use and care of surveying instruments, note keeping, distance measurements, traverse surveying, areas, angles and elevations, legal principles, and elementary map making. They also cover planetable and transit methods of topographic map production, field problems related to highway surveying, circular and vertical curves, earthwork, volumes and cost estimates, triangulation and base lines. Prerequisite: MATH 1303 or equivalent.

ENGR 1305 Engineering Problems

(3-0) Credit: 3

This is an introductory course in engineering for students of physics and engineering which includes elementary statics and dynamics. Emphasis is given to the engineering method of analysis in problem solving.

ENGR 2301 Advanced Problems in Surveying (2-3) Credit: 3
Advanced problems in circular, parabolic, and spiral curves; adjustment of level lines and nets; conversion from plane to geodetic coordinates and reverse; establishment of triangulation nets; and other problems encountered in extensive and in special purpose surveys. Essential elements of analytical geometry and of statistics will be applied to problems. Prerequisite: ENGR 1302 and 1304.

ENGR 2302 Land Mapping

(2-2) Credit: 3

The drawing of contour maps, plot plans, parcels or tracts of land surveyed, and the layout of subdivisions; the drawing of road maps as used by civilians and the military. Prerequisite: ENGR 1304.

English (ENGL)

ENGL 1300 English Fundamentals (3-0) Credit: 3

A study of basic composition skills with emphasis on sentence structure, paragraph structure, and grammar. Not intended for non-English speaking students.

ENGL 1301 Composition & Rhetoric I (3-0) Credit: 3
Composition of short papers, with emphasis on sentence structure, paragraph development, and paper organization. Analysis of expository prose.

ENGL 1302 Composition & Rhetoric II (3-0) Credit: 3
An introduction to literature; the short story, poetry, drama, and the novel. Composition of short papers with emphasis on interpretation and analysis of literary selections, optional

research paper. Prerequisite: ENGL 1301 or advanced standing.

## ENGL 1303, ENGL 1304 English for Foreign Students I & II

(3-2) Credit: 3, 3

Speaking and writing for students whose native language is not English. Intended to aid foreign students in attaining greater facility in the use of the English language.

ENGL 1305 Basic English I

(2-1) Credit: 3

A review of English fundamentals emphasizing the development of reading techniques by improving reading comprehension and rate, word recognition, and vocabulary development. Instruction is also given in phonics and spelling.

ENGL 1306 Basic English II

(2-1) Credit: 3

A continuation of Basic English I. A continued review of English fundamentals with the emphasis on the further development of reading techniques by improving reading comprehension and rate, word recognition, and vocabulary development.

ENGL 1307 Business English

(3-0) Credit: 3

Fundamentals of grammar, punctuation, and sentence structure as employed in written business communications. A review of word study, sentence analysis, punctuation, paragraphing. Required for all students majoring in Office Administration.

ENGL 1309 Communications Skills

(3-0) Credit: 3

This course includes topics of instruction in grammatical construction, spelling; punctuation; writing effective business letters; preparation of technical reports, business forms and blanks; speaking to groups; business meetings; personal interviews; telephone conversations; and social speech situations.

ENGL 2301 English Literature I

(3-0) Credit: 3

A survey of English literature from Beowulf through the eighteenth century. The study includes selections of poetry, prose, and drama. Prerequisites: ENGL 1301, 1302.

ENGL 2302 English Literature II

(3-0) Credit: 3

A survey of English literature beginning with the Romantic period and including masterpieces of Victorian and contemporary writers. The study includes selections of poetry, prose, and drama. Prerequisites: ENGL 1301, 1302.

ENGL 2303, 2304 World Literature I & II

(3-0) Credit: 3,3

A study of masterpieces of Western World Literature from Homer through the Renaissance and from Homer to the present. Prerequisites: ENGL 1301, 1302.

ENGL 2305 American Literature I

(3-0) Credit: 3

Survey from the beginning to 1860. A critical study of the major American writers from Franklin to Faulkner. Both narrative and expository prose are studied, along with poetry and drama. Prerequisites: ENGL 1301, 1302.

ENGL 2306 American Literature II

(3-0) Credit: 3

Survey from 1860 to the present. Considers the major literary movements in poetry, prose, and drama. Prerequisites: ENGL 1301, 1302.

ENGL 2309 Technical Writing

(3-0) Credit: 3

This course is designed to provide an opportunity to apply the principles of exposition to the preparation of formal written and oral technical reports. Various types of reports that utilize modern style and format are covered in this course.

ENGL 2350 Effective Army Writing I

(3-0) Credit: 3

A study of basic composition skills with emphasis on sentence structure, paragraph structure, and grammar. Aimed primarily at development of skills and techniques necessary for writing effective military correspondence.

**Environmental Control (ENCT)** 

ENCT 1301 Water and Waste Water Technology (3-0) Credit: 3
A study of method of disease transmission, hygienic excreta disposal, municipal and industrial waste water collection and treatment, characteristics of water, water treatment, protection of ground water insect and rodent control, solid waste collection and disposal, milk

and food sanitation, swimming pool sanitation, and industrial hygiene.

ENCT 1302 Aquatic Biology

(2-3) Credit: 3

A study of fresh water as an environment, its physical and chemical characteristics; and characteristics of plant and animal communities which inhabit it. The morphology, life history, and taxonomy of fresh water aquatic organisms. (Field trips required.)

ENCT 1303 Solid Waste Management (3-0) Credit: 3
Types of solid waste, physical and chemical method of handling solid waste, possibilities of re-cycling (re-using) solid waste material, possibilities for by-products from solid waste.

ENCT 2201 Pollution Abatement Seminar I

(2-0) Credit: 2

Particular problems involving pollution and control in our environment are to be presented and discussed by students in oral reviews. The "how, why, and what-to-do" aspects of pollution are to be stressed.

(2-0) Credit: 2 Pollution Abatement Seminar II ENCT 2202

A continuation of ENCT 2201.

(2-3) Credit: 3 Air Pollution ENCT 2301

Sources of air pollution - industrial, municipal, automotive; physical and chemical nature of air pollutants. Laboratory techniques for detecting air pollutants. Control and treatment of air pollution.

(2-3) Credit: 3 Industrial Waste Control ENCT 2302

Company policies, organizational problems, legal responsibilities in waste control, investigations into possible regional pollution, and preventive tactics that could be employed.

ENCT 2303 (2-3)Instrumentation

An elementary study of hydraulic, pneumatic, mechanical, electronic control systems and components. It includes a basic description, analysis, and explanation of instrumental controls for a waste water plant. Typical performance characteristics, accuracy, and application of instruments are studied.

ENCT 2304 Water Quality Control

(2-3) Credit: 3 A study of basic principles of water purification, including aeration, sedimentation, rapid sand filtration, chlorination, treatment chemicals, taste and odor control, bacteriological control, mineral control, design criteria, maintenance programs, and operational problems. New processes and recent developments are studied. Criteria rules, regulations, forms, and records associated with the field are considered.

ENCT 2401 Water and Waste Water Chemistry (3-3) Credit: 4 Theory and laboratory techniques for all control tests of water purification and analysis, including color, turbidity, pH, hardness, coagulation, chlorides, flourides, iron, manganese, bactericides, nitrates, and organic compounds which may be present in water. Qualitative

Farm and Ranch Management (FRMG)

FRMG 1301 Wildlife Management (3-0) Credit: 3 An introduction to the wildlife and fishery resources of the United States, with special

reference to Texas. The importance of plants and animals in our economic cultural life. An account of what has happened to North American wildlife, with considerations of specific plans and methods for its rehabilitation, maintenance, and increase.

FRMG 1302 Range Management

and quantitative analysis are to be stressed in this area.

(2-4) Credit: 3 Range management for the southwestern part of the United States. Physical features affecting range conditions, problems in range management, administration and management of range lands, identification of major grasses and legumes.

FRMG 1303 Soil Science

(2-4) Credit: 3 A basic course in soils in which principles of the physical, chemical and biological properties of the soil are covered. Soil fertility and testing are emphasized.

FRMG 1304

Animal Health (2-4) Credit: 3

Students will study the basics of internal and external parasites, principal diseases of livestock, identification and control of diseases and pests.

Vegetable Production FRMG 1305

(2-4) Credit: 3 Principles and practices in producing vegetable crops, including organic gardening, soil

management, composting, starting, transplanting and growing plants, insect control, fertilizing, and harvesting. Laboratory consists of application of the above practices.

FRMG 1306 Elementary Horsemanship (2-4)Credit: 3 This course includes theoretical and laboratory instruction in the proper grooming, saddling, bridling, and mounting of the horse. Proper body posture and hand position of the rider is also covered. Additional topics of instruction include the anatomy of the horse and riding in western saddles.

FRMG 1307 Intermediate Horsemanship (2-4)Credit: 3

This course is a continuation of Elementary Horsemanship and includes the development of the balanced seat, hands and posture at the natural gaits of the western stock horse. Additional topics of instruction include the use of caveletti, jumping, methods of transportation and care of horses while in transit. Prerequisite: FRMG 1306 or approval of the Department Manager.

#### FRMG 2301 Farm Mechanics I

(2-4) Credit: 3

Basic farm skills in tool conditions, sketching, carpentry, concrete, farm surveying, and small engine repair.

FRMG 2302 Farm Mechanics II

(2-4) Credit: 3

A second course in farm shop skills for the agriculture student. Construction, repair and maintenance of farm machinery; covers metal work, including arc welding, oxy-acetylene welding, cutting, and soldering.

FRMG 2303 Feeds and Feeding

(2-4) Credit: 3

Chemical compositions of feeds, nutrients, requirements of farm animals, utilization of feeds, formulating and balancing rations.

FRMG 2304 Horse Production

(2-4) Credit: 3

This course includes theoretical and laboratory instruction in the history, evolution, breeding, and functions of the horse. Basic principles of equine nutrition, reproduction, inheritance, disease and parasite prevention and control, skeletal and muscular form, and function of the horse are also covered. Additional topics of instruction include the proper care and handling of horses for work and for pleasure.

FRMG 2305 Advanced Equitation

(2-4) Credit: 3

This course includes theoretical and laboratory instruction in stock seat equitation, western riding techniques, the judged arena and time events in horsemanship. Prerequisite: FRMG 1307 or approval by Department Manager.

FRMG 2306 Livestock Marketing

(2-4) Credit: 3

Areas of livestock production and consumption, problems of producers and consumers, study of the agencies concerned with processing and distribution of meat and by-products, slaughtering of livestock, future marketing. Use of farm and ranch records and accounts.

FRMG 2307 Livestock Production

(2-4) Credit: 3

The principles involved in and the practical application of breeding, feeding, care, and management of cattle, swine, sheep, poultry, and rabbits. Fitting animals for livestock shows will also be included.

FRMG 2308 Animal Breeding

(2-4) Credit: 3

This course includes theoretical and laboratory instruction in principles of genetics, kinds of mating, horse selection, hybrid vigor, pedigree, artifical insemination, and pregnancy testing. Prerequisites: AGRI 1301, BIOL 1401, and BIOL 1402.

FRMG 2401 Food Preservation

(3-3) Credit: 4

The principles and practices involved in the processing and preservation of fruits, vegetables, and other food products. Units to be included are field selection, processing, freezing, canning, curing, and storing.

FRMG 2402 Farm Equipment Maintenance & Repair (3-3) Credit: 4

This course covers the theory and practical laboratory experience in the proper maintenance, repair and operation of farm and ranch equipment and improvements. Emphasis is placed on preventive maintenance, troubleshooting, and the construction of farm fences, gates, and buildings.

Finance and Banking (FIBA)

FIBA 1301 Banking Principles

(3-0) Credit: 3

The fundamentals of bank functions presented in a descriptive fashion so that the beginning banker may acquire a broad and 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 (trust, international and safe deposit), accounting and marketing, external and internal 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 of 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 the money supply; cash assets and liquidity management; investments, loans, earnings, and capital; the Federal Reserve System and its policies and operations; Treasury Department operations; and the changing international monetary system.

FIBA 1401 Finance & Banking Internship I

(1-20) Credit: 4

This course consists of on-the-job financial training that utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student is employed at an approved work station under the supervision of the college banking coordinator.

Finance & Banking Internship II

(1-20) Credit: 4

This course is a continuation of Finance and Banking Internship I. Prerequisite: FIBA 1401.

Federal Regulations of Banking FIBA 2301

(3-0)

Some of the topics covered are agencies regulating financial institutions, bank characters, 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)

This course presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles of banking 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; the marketing mix (product strategy, distribution strategy, advertising and sales promotion, personal selling, and pricing strategy); and the methods of marketing planning.

FIBA 2304 Installment Credit

(3-0)

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.

Investment Principles FIBA 2305

(3-0) Credit: 3

The study of investments to detail the basic principles necessary to prepare individuals to operate in the securities markets either on their own or on behalf of an institution employing their services. Especially important are the relationship of investments to business and the unique functions, advantages, and purpose served by a wide range of securities. Investment terminology is covered in detail.

Analyzing Financial Statements

(3-0) Credit: 3 This course includes characteristics of financial statements and financial statement analysis. Goals, methods, and tools of analysis; analysis of profit and loss, accounts receivable, inventories and balance sheets; the relationship of balance sheet accounts to sales; and projected statements cash budgets are studied. Prerequisite: ACCO 2303.

Finance & Banking Internship III

 $\{1-20\}$ 

This course is a continuation of Finance and Banking Internship II. Prerequisite FIBA 1402.

FIBA 2402 Finance & Banking Internship IV

(1-20)

This course is a continuation of Finance and Banking Internship III. Prerequisite FIBA 2401.

#### Fire Protection (FPRT)

FPRT 1301 Fundamentals of Fire Protection

(3-0)

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 standard 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 communications systems; importance of public relations, report writing and record keeping; measurements of results, use of records to improve procedures, and other related topics; legal aspects relating to fire prevention and fire protection with stress on municipal and state agencies; design and construction of fire department buildings.

#### FPRT 1307 Fire Service Chemistry I

(3-0) Credit: 3

An introductory study to inorganic and organic chemistry, with emphasis on the metric systems, 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 1

(3-0) Credit: 3

Specific concerns and safeguards related to business and industrial organization. A study of industrial fire brigade organization and development, plant lay-out, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organization. Study of elementary industrial fire hazards in manufacturing plants.

#### 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, handling hazardous materials, i.e., flammable liquids, combustible solids, and gases. Emphasis on emergency situations and most favorable methods of handling fire fighting and control. Prerequisite: FPRT 1307.

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 cities' liability for acts of the fire department and fire prevention bureaus. An in-depth study of various cases concerning firefighters, fire departments and municipalities.

FPRT 2305 Building Codes and Construction (3-0) 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 laws, decisions and opinions; kinds of arsonists, interrogation procedures, cooperation and coordination between firefighters and arson investigators and other related topics.

FPRT 2308 Hazardous Material 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 radio-active 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. Prerequisites: 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 examination and study of the physical and psychological variables related to the occurrence of casualities. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks.

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 Mutual Aid and large scale command problems. Prerequisite: Completion of, or registration therein of all other required fire courses.

### Food Service Management (FSMG)

FSMG 1250 Food Service Management

(2.5-0) Credit: 2

Food Service Management, provides basic principles of management process, personnel management, goal setting, job performance and evaluation, delegation of authority and motivation.

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 & 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 National Institute for the Food Service Industry (N.I.F.I.) sanitation examination.

FSMG 1304 Work Organization

(2-2) 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; variety and nutrition in menu planning; techniques of preparing attractive menus and maintaining budgetary controls; 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, accompanied by 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

Short order food preparation is an introductory course that includes instruction on the basic equipment, tools and preparation techniques necessary to qualify a student to operate a short order food station sufficiently efficient to handle large numbers of customers in a short time.

FSMG 1401 Food Preparation & Serving

(3-3) Credit: 4

An introduction to techniques of food preparation. 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.

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 and how to make breads, yeast-raised dough products, fried 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.

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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

(2-0) Credit: 2

This course is designed to give fine points of culinary skills and theory. Preparation of classical food menus and the arts of serving food.

FSMG 2251 Culinary Skills

(2-2) Credit: 2

Food Preparation and Serving, 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, as they relate 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.

FSMG 2304 Marketing & Sales Promotion\* (3-0) Credit: 3

A course designed to develop an understanding of what must be done in order to bring the wheels of production and consumption in the United States into mesh. 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 2305 Financial Management\*

(3-0) Credit: 3

Methods and application of financial management within the combined food service facility. Primary emphasis upon sales accountability and internal controls utilized within bar, food, dining room, and hotel operation area. Secondary emphasis on budgeting and forecasting with application of effective labor/sales ratios. Prerequisite or Corequisite: MATH 1307.

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 2307 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.

FSMG 2353 Creative Cooking

(2-3) Credit: 3

Exhibition Work, the art of combining creativity and design with superior food preparation and serving the art of "Garde Manger" is taught.

FSMG 2355 Kitchen Management & Food Serving (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.

FSMG 2401 Classical Food Preparation

(3-3) Credit: 4

This course emphasizes the fine points of culinary skills and theory. Concentration on the preparation of menus. Responsibility of the Chef and Sous-Chef.

FSMG 2402 Exhibition Work

(3-3) Credit: 4

Taught in conjunction with Classical Food Preparation. This course is designed to assist the student in professional employment. The essence of exhibitions, 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 utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student is employed in an approved work station in the food service industry under the supervision of a college coordinator. Prerequisite: Sophomore standing and consent of the Department Manager.

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 in an approved work station in the food service industry under the supervision of a college coordinator. Prerequisite: FSMG 2405.

FSMG 2452 The Chef's Course

(2.5-2.5) Credit: 4

Course is designed to develop a combination of good management practices, food preparation expertise, artistic creativity in laboratory exercises in food preparation. Student will be required to prepare and serve a buffet meal.

\*Nationally certified courses.

### Foreign Language

(See French, German, or Spanish)

#### French (FREN)

FREN 1401 Beginning French I

(3-3) Credit: 4

This course includes basic grammar drill, pronunciation drill, simple reading, and conversation.

FREN 1402 Beginning French II

(3-3) Credit: 4

Elementary grammar is completed. Pronunciation, drill, and conversation based on reading are continued. Stress is given to everyday conversational phrases. Prerequisite: FREN 1401.

FREN 2301 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 1401, 1402, or two years of French in an accredited high school.

FREN 2302 Intermediate French II

(3-0) Credit: 3

This course continues the drill on syntax as needed for reading, composition, and conversation. Prerequisite: FREN 2301.

#### General Secretarial

(See Office Administration)

### Geography (GEOG)

GEOG 2301 Elements of Physical Geography

(3-0) Credit: 3

The basic physical elements of geography: maps, climate, natural resources, and land forms.

GEOG 2302 Cultural Geography

(3-0) Credit: 3

A survey of the ways people adapt to their environment, describing what constitutes culture, comparing the various types, and emphasizing communities, livelihoods, and organizational interaction.

### Geology (GEOL)

GEOL 1401 Physical Geology

(3-3) Credit: 4

An introductory course in the nature and properties of the materials which make up the earth. Topics included are processes of glaciation, volcanism, weathering, and erosion. Modern theories such as plate tectonic are also studied. Field work, including the study of local rocks and minerals, is an integral part of the course.

GEOL 1402 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.

### German (GERM)

GERM 1401 Beginning German I

(3-3) Credit: 4

For those who have had no previous work in German. The essential grammar expression. Three laboratory hours per week are required for the memorization and presentation of German dialogues by the students.

GERM 1402 Beginning German II

(3-3) Credit: 4

A continuation of Beginning German I. Prerequisite: GERM 1401 or its equivalent.

### Government (GOVT)

GOVT 2301, 2302 State & Federal Government I & II (3-0) Credit: 3, 3 Fulfills the legislative requirements for six hours of American Government. A functional study of the American constitutional and governmental system, federal, state, and local. Special attention to Texas. The origins and development of the American governmental system; federal-state and interstate relations; lesser units of government; the individual as a citizen, person, and voter; political parties. Legislative, executive, and judicial functions in federal and state governments; financing governmental activities; foreign relations and national defense; governmental services and functions.

GOVT 2303 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.

## Health Service Management (HEOE)

HEOE 1301 Introduction to Health Service Management (3-0) Credit: 3 This course provides an overview of the health care facilities such as hospitals, clinics, nursing homes and health maintenance organizations. It considers the overall operations of these facilities.

**HEOE 2301** Medical Terminology

(3-0) Credit: 3

This course covers prefixes and suffixes, diagnostic, operative and symptomatic terms and medical abbreviations.

## History (HIST)

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; war for southern independence; 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; contemporary America.

HIST 1303, 1304 History of Western Civilization (3-0) Credit: 3, 3

A survey of the development of European civilization. Major topics include the Graeco-Roman heritage, the barbarian migrations, the growth and development of the Church, the rise of capitalism, medieval society, and the origin of nationalism in Europe. The Age of Reason and the French Revolution, the Napoleonic Wars, the growth of nationalism and democracy in the 19th century, the causes and consequences of the two World Wars and the rise of dictatorship.

HIST 2301 International Relations and U.S. (3-0) Credit: 3
Foreign Policy

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.

HIST 2302 Studies in American History (3-0) Credit: 3
This course is a survey of the major developments in United States history with special emphasis on the international developments since 1945 in which the American people have played dominant or decisive roles. The influence that Europe and Asia have had on the United States will also be examined. Other countries' foreign policies, the Cold War, the rise of the Third World and the American social and cultural revolution are major topics of instruction in this course. Prerequisite: HIST 1301 and HIST 1302 or consent of instructor.

HIST 2303 History of Religion (3-0) Credit: 3 A study of the origin, progress, and development of the Christian religion. Attention will be given to the development of beliefs and the rise of denominations.

HIST 2304 World Religions
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.

HIST 2350 & HIST 2351 Military History I & II (3-0) Credit: 3, 3 Courses designed to give the non-commissioned 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.

### Horse Management

(See Farm and Ranch Management)

### Hotel-Motel Management (HMMG)\*

HMMG 1300 Food & 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 (3-0) Credit: 3 and Administration

This course includes management and organization of hotel industry, communications, accounting, personnel relations and administration, management of guests. 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 form for accounting controls.

HMMG 1304 Hotel/Motel Sales Promotion

(3-0) Credit: 3 This course includes sales planning, media advertising to include outdoor, radio, and TV; mail advertising, personal sales; telephone selling; individual and group room business; food and beverage sales and sales incentive.

Hotel/Motel Law HMMG 2301

(3-0) This course includes a study of the consequences resulting from a lack of foresight on the part of management, understanding of the attitudes of courts toward innkeepers involved in litigations, and an awareness of the responsibilities law imposes upon the innkeeper.

HMMG 2302 Supervisory Housekeeping (3**-**0) This course includes organization of a housekeeping department of a hotel, 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 Hotel/Motel Financial Management (3-0) Credit: 3 This course includes accounting of business for creditors, owners, and government; control of payroll and other operational expenses; and profit making management. Prerequisite or Corequisite: MATH 1307.

HMMG 2305 Hotel/Motel Maintenance (3-0) Credit: 3 This course includes a study of the organization, terms and concepts common to building maintenance. Maintenance functions to be studied include heating, plumbing, electrical, refrigeration and air conditioning, communications and signal system, kitchen equipment, fire prevention and protection, and elevator systems.

HMMG 2306 Recreational Services (3-0) Credit: 3 This course includes the study of the needs of guest recreation and entertainment, space available for these activities, cost of operation and maintenance, layout and design and direct

and indirect benefits.

HMMG 2401 Hotel/Motel Internship I (1-20) Credit: 4 This course consists of on-the-job hotel/motel training that utilizes the principles, skills and knowledge gained in the theoretical setting of the classroom. The student is employed at an approved work station under the supervision of the college hotel/motel intern coordinator. Student must have Department Manager's permission to enroll.

HMMG 2402 Hotel/Motel Internship II (1-20) Credit: 4 This is a continuation of Hotel/Motel Internship I. Prerequisite: HMMG 2401.

\*All courses certified by the American Hotel and Motel Association.

### Japanese (JAPN)

(3-0) Credit: 3 JAPN 1301 Beginning Japanese I Introduction to Japanese with attention to conversation, grammar and the written forms. There will also be readings of simple texts dealing with Japanese life and culture.

Beginning Japanese II (3-0)Continuation of Japanese conversation, grammar and the written forms. Emphasis is on reading texts dealing with Japanese life and culture. Prerequisite: JAPN 1301.

### Iournalism (IOUR)

**Communications Media** (3-3)This course is designed to give the student an understanding and respect for the mass media of the modern world. It includes a survey of all the mass communicative media, their purposes, and methods of operation.

[3-3] Credit: 4 News Gathering & Reporting IOUR 1402 Designed to acquaint the student with fundamental news gathering and writing techniques for the print medium. It includes instruction and practice in interviewing, writing, and discussion of news sources and values.

### Law Enforcement (LAWE)

LAWE 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. Techniques of self-defense, 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.

Introduction to Criminal Justice (3-0) 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. LAWE 1302 Basic Criminal Investigation (3-0)

conduct at crime scenes, collection and preservation of evidence. LAWE 1303 Legal Aspects of Law Enforcement (3-0)History and philosophy of modern criminal law, including the structure, definition and application of statutes and leading case law, the elements of crimes and penalties; general

Introduction to the fundamentals of criminal investigation, including theory and history.

Criminal Procedure & Evidence (3-0) LAWE 1304 Credit: 3 Introduction to the rules governing the admissibility of evidence and types of evidence: criminal procedures in various courts, review of the Model Code of Criminal Procedure. including laws of arrest, search and seizure, and leading case law on each topic.

LAWE 1305 Traffic Law

provisions of the Penal Code.

This course is designed to cover all laws pertaining to the control and enforcement of traffic. The officer 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.

LAWE 1306 **Survey of Corrections**  (3-0)Credit: 3

A general course describing the history and evaluation of the corrections process. Covers all aspects of institutional and community based corrections.

**Police-Community Relations** (3-0)The role of the individual officer in achieving and maintaining positive public response; intergroup relations and public information.

LAWE 1308 Police Role in Crime & Delinquency Study of deviate behavior and current criminological theories, with emphasis on police applications; crime prevention and the phenomena of crime as it relates to juveniles.

LAWE 1309 Police Organization and Administration Principles of organization and management as applied to law enforcement agencies; introduction to concepts of organizational behavior.

**Advanced Criminal Investigation** (3-0) Modern methods and skills required for criminal investigation, to include discovery methods. development and lifting of latent fingerprints; criminal scene sketches; the use of plaster and silicone rubber for reproducing evidence at crime scene; use of modern investigation aids; and techniques of criminal interviews. Prerequisite: LAWE 1302.

LAWE 2101 **Emergency Medical Aid** (1-1)Credit: 1 This course will focus 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 the police firearms will be emphasized at all stages of teaching and firing.

LAWE 2301 Probation & Parole

(3-0) Credit: 3

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 can function efficiently in the field.

LAWE 2303 Law Enforcement Seminar

(3-0) Credit: 3

A problems course dealing with current criminal justice trends, issues, and literature. Prerequisite: Approval of appropriate College official. This course may be repeated for credit.

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 engineering, education, and enforcement at the supervisory level.

LAWE 2307 Penology (Jail Operation & Management) (3-0) Credit: 3 A survey of the basic concepts of penal and correctional rationale as employed by criminal justice administrators. An overview of the operation and management principles of the institutional setting will be examined in depth.

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 2309 Provost Marshal Operations

(3-0) Credit: 3

The principles of organization and administration as applied to the operational system of a military Provost Marshal's office as well as that of the Inspector General's. Practical training in conduct of briefings, management, and attendant qualities of leadership, and some cases of dissident conditions which might impair role and mission of the dissident command.

LAWE 2310 Correctional Control & 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 a correctional facility; emergency measures, prisoner privileges; and the records and reports of the detention center.

LAWE 2350 First Responder

(3-0) Credit: 3

This course covers health knowledge with regard to 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 injury or illness.

### Legal Assistant (LEGA)

LEGA 1301 Introduction to Legal Assistant (3-0) Credit:

This course provides a general introduction to the law with emphasis on the role of the Legal Assistant. To give the 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; 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 program of Legal Assistant.

LEGA 1302 Techniques of Legal Research (2-2) 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 lawbooks, 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 treaties. Other sources of research, the federal and state codes and reports and administrative regulations will also be covered.

**LÉGA 1304** Principles of Family Law

(3-0) Credit: 3

The legal aspects of divorce and annulment, separation, defense, custody, habeas corpus, support, alimony, tax consulting, out-of-state divorces and validity and jurisdiction service will be discussed. Students will receive a review analysis of separation and custody agreement, as well as the other documents involved in divorce proceeding.

LEGAL 1305 Law of Real Property and Real Estate Transactions

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, contracts, leases, deeds of trust, etc.; drafting problems involving projects related to the subject matter; study of the system or recording and search of public documents. Prerequisite: LEGA 1301.

LEGA 1401 Legal Writing, Legal Documents, Wills, (3-3) Credit: 4 Trust and Probate

This course presents the basics of legal writing and legal documents which a legal assistant will have to deal with. The various kinds of legal writing will be considered. These are: letters. instruments (e.g., contracts, deeds, wills, bonds, leases), pleadings (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 1301 and ENGL 1301.

LEGA 2301 Tort and Insurance Law and Claims Investigation

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; documenting cases and gathering evidence. Prerequisite: LEGA 1302,

LEGA 2302 Personal Property, Sales and (3-0) Credit: 3 Credit Transactions

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 Commerical Code and its effect on the course subject matter. Prerequisite: LEGA 1301.

**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:

(3-1)

Credit: 3

(3-0) Credit: 3

LEGA 1301.

Criminal Law and Procedures LEGA 2304 (3-0) Credit: 3 A study of the Texas Penal Code including definitions of various kinds of defenses and trial

procedures; the United States Constitution as it pertains to criminal law; practice in drafting subpoenas, writs, briefs and other trial papers. Prerequisite: LEGA 1301.

**LEGA 2305** 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) pretrial proceedings (motions to dismiss, motions for summary judgment, pretrial 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 a complex file 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.

LEGA 2401 Techniques of Legal Practice [3-3]

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 statute of limitation, client, 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. Prerequsities: LEGA 1301 and 1302.

**Income Taxation and Legal Accounting** (3-3) Credit: 4 LEGA 2402 Study of federal, state and local income taxation of individuals and taxpaying entities such as estates, trusts and corporations. Emphasis is placed on the preparation of basic tax returns and other tax-related documents. The course also includes a general introduction to accounting as it relates to legal problems. Prerequisite: LEGA 1301 and BUSS 2401.

Legal Office Ethics and Management (3-3)Credit: 4 This course will provide the ethical considerations applicable to the legal assistant, office organization, specialized bookkeeping, and accounting for attorneys fees and billing procedures, scheduling and calendaring, legal research, management of personnel, proofreading, management of investigations and file preparation, legal drafting, management and organization procedures for specialized areas of law, special considerations with respect to attorney's trust account, preparation of law office forms, check list and files, and disbursement on behalf of clients.

Legal Assistance Practicum (1-20)LEGA 2404 This course consists of on-the-job training in the legal field. It utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student works at an approved work station under the supervision of a College coordinator. Only students who do not have a minimum of one year experience in the legal field are required to take this course. Prerequisite: Sophomore standing or consent of the Department Manager.

# Machine Tools Operator (MATL)

MATL 1401 Precision Tools and Layout (2-4) Credit: 4 A course designed to provide the student with an understanding of shop safety, reading and handling of precision tools, layout work and the operation of basic machine shop equipment, such as drill press, grinders and power saws.

**Engine Lathe, Cutting Tools** MATL 1402 (2-4) Credit: 4 Theory and practice in basic metal working, hand and machine tool set up, operation, and maintenance. Basic lathe tool grinding.

Advanced Engine Lathe MATL 1501 (2-6) Credit: 5 Theory and practice in laying out and setting up machine tools to perform selected work. Includes related instruction in basic metallurgy. Prerequisite: MATL 1402.

Milling Machine: Set up, Cutters and Tools(2-6) Credit: 5 MATL 1502 Practice in set up and operation of vertical and horizontal milling machine and shaper, and detailed instruction in selecting cutters, feed rates, R.P.M. and material holders.

**Grinding Machines: Universal** MATL 1503 (2-6) Credit: 5 Cutters and Tools

Set up machine for grinding milling cutters, lathe tools and drills. Selection of proper grinding wheels.

# Maintenance Technology (MTNT)

Shop Practice & Safety MTNT 1400 (3-3) Credit: 4 This course is an introduction to shop safety methods and practices, proper use of hand and power tools, and basic skills involved in the maintenance technology field.

MTNT 1401 Carpentry I (2-4) 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: MTNT 1400 or permission of Department Manager.

MTNT 1402 Electricity (2-4) 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: MTNT 1400.

MTNT 2401 Masonry (2-4) Credit: 4 This course covers the theory and practical applications of setting forms, pouring and finishing concrete slabs, laying of brick, concrete tiles, and ceramic tile. Prerequisite or corequisite: MTNT 1400.

MTNT 2402 Carpentry II

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.

(2-4)Plumbing MTNT 2403

This course covers the theory and practical application on 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: MTNT 1400 or permission of Department Manager.

Painting & Refinishing MTNT 2404

Credit: 4 (2-4)

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: MTNT 1400.

Foundations, Framing, and Roofing Credit: 4 MTNT 2405  $\{2-4\}$ 

The student will be introduced to form fabrication, setting foundations, setting piers and castings and will practice framing and roofing residential buildings. Students will aso have practical exercises in roofing. The course will also cover modern methods of placement of materials for structures and building layout systems. Prerequisite: MTNT 1401.

**MTNT 2406 Building Materials and Estimating** (3-3)

The 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 sheeting material requirements. Prerequisite: MTNT 1401.

MTNT 2407 Interior-Exterior Finishing

(2-4)Credit: 4

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

Credit: 4 (2-4)

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

(2-4)

Practical application in the basic skills in the set-up and operation of wood machines. The course also dovers mass production of fine cabinetry and millwork and wood finishing. Prerequisite or corequisite: MTNT 2408.

# Management, Business (MGMT)

Safety (OSHA) MGMT 1302

(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 1304 Work Organization (2-2)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.

Introduction to Management

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)

Introduction to theory and practice of insurance, including life, fire, automobile, and personal and business risk.

MGMT 1309 Income Tax (3-0) Credit: 3

Income tax legislation; present income tax law and regulations; treasury decisions, court decisions, and departmental rulings; income tax problems and returns.

Marketing Principles MGMT 2301

(3-0) Credit: 3

The study of Marketing as an exchange relationship in public and private organizational concerns, includes an orientation of the different prevailing thoughts in marketing today, including the historical, economic, consumer, and systems approaches. Market research and market segmentation strategies are examined, as well as current government agency regulation concerning marketing practices.

MGMT 2302 Personnel Management

(3-0) Credit: 3

The dynamic role of management as it relates to personnel, with emphasis on the management aspects important to the line executive or supervisor. Personnel functions and procedures are viewed in the light of management objectives while personnel management is treated as an active and dynamic process which is motivated by basic human drives.

Business Law I

(3-0) Credit: 3

Nature and scope of law; court system; law of contracts; principal and agent; business organizations, including partnerships and corporation; Texas community property laws.

MGMT 2306 Business Law II

Additional studies in law of business, dealing with bailments, carriers, mortgages. suretyships, negotiable instruments, banks and banking, wills and estates, sales, bankruptcy.

MGMT 2307 Life Insurance

(3-0) Credit: 3

Principles of life insurance, business and personal use in insurance; classification and analysis of policiest 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.

# Management, Applied (MGMT)

Military Correspondence Typing Course (.5-2) MGMT 1151 Gredit: 1 MGMT 1152 Military Correspondence Typing Course (1-3) Credit: 1 This course is designed to improve and expand the basic typing skills with emphasis on production of various forms of military correspondence.

(1.3-1.3) Credit: 1 MGMT 1153 The Army Maintenance Management System (TAMMS)

This course is designed to provide information on the purpose, use, preparation and disposition of Maintenance Management Forms for Army personnel.

(2-.5) Credit: 1 MGMT 1154 Supply Management Course This course provides detailed and management information on preparation and maintenance of unit supply records, hand receipt, personal clothing records, laundry, and accounting for lost, damaged, and destroyed property utilizing DA PAM 710-2-1 and DLOGS systems.

MGMT 1155 Prescribed Load List Course (DLOGS) (1.3-1.3) Credit: 1 This course provides management and detailed information for initiation, requesting and accounting for repair parts under the DLOGS System TM 38-L22-15-2 and DA PAM 710-2-1.

MGMT 1156 Prescribed Load List (Manual) (1.3-1.3) Credit: 1 This course provides management information and detailed information on initiation, posting, maintenance of accounting records under a manual system and requesting and turning in repair parts using DA PAM 710-2-1.

MGMT 1157 Maintenance Management Training Course (1.5-1) Gredit: 1
This course is designed to teach maintenance supervisors management. To include resources, personnel, scheduling, human relations, cooperation, and operation procedures.

MGMT 1159 Gollege Typing and Military Correspondence (A) (1.5-2) Credit: 1

This course is designed to teach typing up to 25 words a minute, Army functional files, military correspondence, military orders and handling and safeguarding of classified information.

MGMT 1160 Beginning Typing and Military Correspondence (.5-2.3) Credit: 1

This 45 hour course is designed to provide sufficient practice for the soldier to develop his/her career field as clerk typist. Upon completion of this course, soldiers will be able to type at a minimum of 25 WPM (GWAM) and produce simple military correspondence such as disposition forms, military letters, civilian letters, and indorsements.

MGMT 1301 Organization and Management (3-0) Credit: 3 Organizational structure can have considerable impact on the manner in which an organization functions. The student studies 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, in specific terms, with how the organization must be structured to fit its environment and operation.

MGMT 1303 Fundamentals of Industrial Management (3-0) Credit: 3 Application of the systems approach to 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 2150 Trainers Workshop (TW) (1.5-0) Credit: 1
MGMT 2154 Trainers Workshop (TW) (1.6-0.7) Credit: 1

MGMT 2154 Trainers Workshop (TW) (1.6-0.7) Gredit: 1
MGMT 2158 Trainers Workshop (TW) (1.5-1) Gredit: 1

Course provides management of training for the small unit, individual SQT and small group performance oriented training.

MGMT 2151 Platoon Trainer's Workshop (0.3-1.3) Credit: 1
MGMT 2155 Platoon Trainer's Workshop (1.6-0.3) Credit: 1

MGMT 2159 Platoon Trainer's Worskhop (0.4-1.8) Gredit: 1

Course provides management of training instruction at the platoon level, includes long and short range planning and ARTEP integrated training for small groups.

MGMT 2152 Training Supervisor's Workshop (0.3 1.3) Credit: 1
MGMT 2156 Training Supervisor's Workshop (0.6-1.4) Credit: 1
Provide training management for the medium sized organization (Battalion) to include long and short range plans, LRC, and ARTEP.

MGMT 2153 Training Managers Workshop (0.7-1.3) Credit: 1
Provide training management information for battalion sized units to include long and short range goals, training assets, money and allocations, and ARTEP standards.

MGMT 2157 Training Manager's Workshop (Ref) (0.5-0.5) Credit: 1
MGMT 2160 Training Supervisor's Workshop (Ref) (0.5-0.5) Credit: 1
Provides refresher training in management of training for person(s) who have previously completed a BTMS TSW workshop.

MGMT 2161 Unit & Organizational Supply [2.5-0] Credit: 1 To provide the students the skills and knowledge to accomplish the duties required of units and organizational supply personnel.

MGMT 2162 Personal Finance Management (Army) (1.3-0) Credit: 1 Develops an understanding of the personal business activities and actions that affect personal and family accounts, budgets, budgetary control, bank accounts, charge accounts, borrowing, buying and investing.

MGMT 2163 Prescribed Load List (1.3-1.3) Credit: 1 This course provides management and detailed information on initiation, posting maintenance of accounting records under the DS-4 system and requesting and turning in repair parts, using TM-98-L32-11 and DA PAM 710-2-1.

### MGMT 2250 Motor Sergeant's Maintenance Management Course

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.

Junior Leader's Maintenance MGMT 2251 Orientation Course

(2.5-0)Credit: 2

(0.6-1.8) Credit: 2

This course is designed to familiarize junior leaders with maintenance concepts, maintenance management, and keeping maintenance forms.

Supply Management Officers Course Credit: 2 [.5-2]This course will provide training in current Supply Management Procedures to include Military publications, property books, hand receipts, requisitions and Turn-In procedures and non-expendable supplies and equipment, Statement of Charges, individual and organizational clothing and equipment and POL accounting records.

College Typing and Military MGMT 2253 Correspondence

(2.5-2.5) Credit: 2

This course provides basic typing skills in touch typing, standard formats, proof reading symbols, and formats used in preparation of military correspondence as prescribed by AR 340-15. Basic military publications ordering, maintenance of files, and posting of regulations are also covered. Class may be split into advanced and basic typing students.

Supply and PLL Procedures MGMT 2254

(2.5-2.5)

This course provides general information for personnel in MOS 76Y or 76C to operate a unit/organizational supply room and Prescribed Load List (Repair Parts) using automated system or manual records.

MGMT 2300 Credit & Collections

 $\{3-1\}$ Credit: 3

The elements of merchantile and consumer credit; organization of a credit department; sources of credit information; collection tolls and procedures.

MGMT 2303 Law & 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 given 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**) 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 2310 Personnel Counseling

(3-0) Credit: 3

Systematic study of major theories of personnel counseling with supervised experience in role-playing utilizing these approaches.

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.

Performance Counseling and (3-0)Credit: 3 MGMT 2350 Certification by Army Supervisors

A course designed to assist the non-commissioned officer in development of performance counseling procedures and techniques for use in the performance of their duties.

Advanced Leadership MGMT 2351

Presents advanced leadership and management techniques, organizational goals, problem solving, communications and management of changes.

Army Personnel Management (3-0) Credit: 3 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 2353 Prescribed Load List (PLL) (2.5-0) Credit: 3

To provide the students with the skills and knowledge to accomplish the duties required of PLL stock supply personnel.

MGMT 2354 Management Problems

(3-0) Credit: 3

This course is designed to develop and improve the soldier's skills to enable him/her to effectively execute the duties required of the military manager.

# Management, Training (MGMT)

MGMT 1158 Training Manager's Workshop (.8-.8) Credit: 2

This course is designed for Battalion and Company Commanders and S-3's for their Training Management duties and stresses training status, goals, priorities, resources and short and long term plans.

MGMT 1201 Management of Performance Oriented Training (2-0) Credit: 2

A course designed to provide a performance oriented approach to managing training in which the manager learns to establish performance oriented objectives, tests, and follow-up evaluations.

MGMT 1202 Briefing Techniques, Aids, and Devices (2-1) Credit: 2 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 to include charts, graphs, posters, slides, filmstrips, transparencies, opaques, and other media.

MGMT 1203 Evaluation of Instruction and Training

(2-1) Credit: 2

A course designed to provide the manager with the rationale, methods, and procedures for evaluating the effectiveness and efficiency of instruction and training. Emphasis will be directed toward evaluating performance oriented training and developing the suggestions for improvement which can be provided to management.

MGMT 1204 Setting Objectives and Goals

(2-1) Credit: 2

A course 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
A course designed to provide managers with techniques for determining organizational and

personnel training requirements. Definition of needs and insuring they are compatible with available resources will be stressed in this course.

MGMT 1206 Professional Resource Management (2-0) Credit: 2 A course designed to provide managers with the capability to assist subordinates in the screening, selection, evaluation, and application of employee training programs.

MGMT 1207 Professional Development of the (2-0) Credit: 2
Manager

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 which will correct mistakes or reinforce good performance that will cause individuals to be motivated.

MGMT 1208 The Training System Management (2-1) Credit: 2 A course designed to provide managers with methods required to plan, organize, staff, influence, and control training. The main purpose will be to develop a plan and employ limited resources to accomplish system objectives.

MGMT 1209 Managerial Theories

(2-0) Credit: 2

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 2201 Job Performance and Motivation (2-0) Credit: 2
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 2202 Individual Orientation Techniques (2-0) Credit: 2
A course designed to provide managers with the skills required to orient personnel in

individual job tasks and to facilitate the continuity of the organizations' functions.

MGMT 2203 Group Orientation Techniques (2-1) Credit: 2
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 2202.

MGMT 2204 Assessing of Training Standards, (2-1) Credit: 2
Goals and Objectives

A course designed to provide managers with the ability to establish realistic and relevant training standards. The relationships among organizational goals, training objectives, and training standards are emphasized to insure continuity of effort. Personnel involved in the process and appropriate strategies and methodologies in the establishment of training standards are also stressed. Prerequisite: MGMT 1204.

MGMT 2205 Management Training Theory

(2-1) Credit: 2

A study of selected learning theories. Emphasis on study and application of training aspects which influence the effectiveness of the training and learning process.

MGMT 2206 Management Learning Strategies (2-1) Credit: 2 A course designed to provide the trainee with a varied approach to the training problem through the study and practical application of alternate means of instruction to accommodate individual learning strategies.

# Management, Food Service

(See Food Service)

# Management, Hotel-Motel

(See Hotel-Motel)

# Mathematics (MATH)

MATH 1300 Introductory Algebra (3-0) Credit: 3
Designed for students desiring a review of fundamental algebraic operations. This course

may not be used as a part of the requirements for a major in mathematics. Topics considered include operations with signed numbers, exponents, operations with polynomials, factoring, operations on rational expressions, solving linear equations.

MATH 1301 Intermediate Algebra

(3-0) Credit: 3

Includes a brief review of fundamental algebraic operations, linear equations, systems of linear equations, determinants, quadratic functions, inequalities, exponential functions, logarithmic functions. Prerequisite: MATH 1300 or equivalent.

MATH 1302 College Algebra (3-0) Credit: 3

Includes consideration of quadratic functions, systems of quadratic equations, quadratic inequalities, matrices, binominal theorem, exponential functions, sequences, progressions, series, and applications. Prerequisite: MATH 1301 or equivalent.

MATH 1303 Trigonometry

(3-0) Credit: 3

Wrapping function, circular functions, trigonometric functions, use of tables, identities, applications to right triangles and oblique triangles, inverse functions, trigonometric equations, logarithms. Prerequisite: MATH 1301 or equivalent.

MATH 1304 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 1303 or equivalent.

MATH 1305 Finite Mathematics I

(3-0) Credit: 3

Symbolic logic, set theory, induction, permutations, combinations, counting methods, probability. Prerequisite: MATH 1301 or equivalent.

MATH 1306 Finite Mathematics II

(3-0) Credit: 3

A continuation of Finite Mathematics I. Introduction to statistics, graphing, vectors, matrices, linear programming, and theory of games. Prerequisite: MATH 1305.

### MATH 1307 Business Math

(3-0) Credit: 3

Introduction to the arithmetic processes in business, including interest, mortgages, taxes, insurance, payroll, inventory deductions, discounts, depreciation, annuities.

MATH 1308 Elementary Statistics

(3-0) Credit: 3

Collection and tabulation of data, bar charts, graphs, sampling, averages, dispersion, correlation, index number, normal curve, probability, inferential statistics, applications.

MATH 1309 Modern Math

(3-0) Credit: 3

An introduction to topics taught in the modern elementary curriculum - modern algebra, geometry, sets, number systems, relations, functions, equivalence, congruence.

MATH 2301 Calculus I

(Fall) (3-0) Credi

A first course in differential calculus. Prerequisite: MATH 1304 or concurrent enrollment in MATH 1304 or equivalent.

MATH 2302 Calculus II

(Spring) (3-0) Credit: 3

A first course in Integral Calculus. Prerequisite: MATH 2301 or equivalent.

MATH 2303 Advanced Calculus

(3-0) Credit: 3

A further study of limits, functions, sequences, series, elementary differential equations, partial derivatives, multiple integrals, surface integrals. Prerequisite: MATH 2302 or equivalent.

# Mathematics, Developmental

(See Developmental Studies)

# Mathematics, Electronics

(See Electronics Technology)

# Mathematics, Technical (TMTH)

TMTH 1300 Technical Mathematics I

(3-0) Credit: 3

A course designed to fill the needs of students in industrial and technical programs. Emphasis is placed on the use and application of the arithmetic fundamentals basic to everyday mathematics. The course includes addition, subtraction, multiplication, and division of whole numbers and fractions leading to the use of percentages, denominate numbers and basic plane and solid geometry.

TMTH 1301 Technical Mathematics II

(3-0) Credit: 3

This course is a continuation of Technical Mathematics I, and includes a study of algebra, trigonometric functions, graphs of trigonometric functions, solution of triangles, and plane and solid geometry. Prerequisites: MATH 1300, or TMTH 1300, or permission of the Department Manager.

# Medical Technology

(See Biology, Chemistry)

# Microcomputer Technology (MISC)

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. An introduction to BASIC programming is provided. Types of hardware and software available for business use will be studied. May not be used as an elective by COSC or MISC majors.

MISC 1451 Introduction to Microcomputer Programming

(3-3) Credit: 4

This course is the first required course for Microcomputer Technology majors. No prior knowledge of computers or programming is assumed. Problem solving, flow-charting, and the programming language BASIC are covered in depth. Applications will emphasize interactive computing techniques.

# MISC 1452 Introduction to Microcomputer Concepts and Operations

(3-3) Credit: 4

A study of what microcomputers are, how they are used, how they operate, how they are programmed, and how they relate to other equipment and computers. The major topics covered are as follows: binary data, computer memories, microprocessor architecture, input/output operation and devices, software, programming (high level and machine language), and microcomputer applications. In a hands-on environment, the student will explore the components that make-up a microcomputer, interface with the system through commands, interact with packaged software, learn standard operational procedures, and perform operator diagnostics. Prerequisite: MISC 1451 or concurrent enrollment.

MISC 1453 Advanced BASIC Programming

(3-3) Credit: 4

An in-depth study of advanced techniques necessary to the writing of efficient and well designed commercial applications. Interactive and conversational programming techniques, to include data editing, menues, string handling, and file handling will be emphasized. Prerequisite: MISC 1451 or COSC 1408.

MISC 1454 PASCAL Programming

(3-3) Credit: 4

A thorough coverage of Structured Programming. Emphasis on top-down programming (where overall structure can be established before adding details), and modular organization (which makes correcting programming errors easier, as any module can be modified independently). Major topics to be covered include: constants, variables, expressions, input and output, self-contained procedures, making decisions (REPEAT-UNTIL, WHILE-DO, and FOR loops), data types arrays, character strings, records and sets, pointers, and disk files. Prerequisite: MISC 1451 or COSC 1404.

### MISC 2451 Micro Assembler Language Programming

(3-3) Credit: 4

This course provides a solid foundation in assembler language programming for the current college microcomputer system. Topics include: addressing, moving data, arithmetic and compare operations, logical operations, bit operations, shift operation, strings, tables, I/O operations, and file handling. Prerequisite: MISC 1452 and either MISC 1453 or MISC 1454.

MISC 2452 Microcomputer Telecommunications (3-3) Credit: 4
A study of the development of systems for telecommunications between microcomputers and other computers and devices. Enables the student to understand telecommunication processes, to select appropriate components such as serial or parallel interfaces and modems for a particular application, to implement the software protocols for the most widely accepted communication links. Prerequisite: MISC 2451 or concurrent enrollment.

# MISC 2453 Systems Programming and Operating Systems

(3-3) Credit: 4

Advanced Assembler Language techniques, primarily in the area of disk input/output. Comprehensive coverage of the major present-day disk operating systems. Disk management, sector and track reading and writing, file conversion techniques, random access I/O, disk sorting techniques, systems generation. The operating systems covered will include several of the most popular operating systems in current use in microcomputers. Prerequisite: MISC 2451.

MISC 2454 Applied Microcomputer Applications (3-3) Credit: 4 Advanced techniques in the utilization of microcomputers. Topics will include the following: microcomputer system configuration, timesharing, multiprocessing, networking, and diagnostic procedures and routines. Programs will be written for selected applications. Prerequisite: MISC 2451.

MISC 2455 Microcomputer Field Projects

(1-9) Credit: 4

This course consists of practical applications in the field of microcomputers, commercial and/or scientific programming, and is designed to fit the needs and career objectives of the student. Prerequisite: Consent of instructor.

# Mid-Management (MDMG)

Leadership Development I (1-1) Credit: 1

The purpose of this course is to develop an awareness and respect for education in marketing and distribution which will contribute to occupational competence, and to promote understanding and appreciation for the responsbilities of citizenship in our free, competitive enterprise system. It is intended for students who are preparing themselves for careers in middle management, sales, advertising, finance, retailing, wholesaling, insurance, real estate, fashion merchandising, food service management, hotel/motel management, and other marketing-oriented occupations. Students will be expected to participate in a student vocational leadership organization, Junior Collegiate Distributive Education Clubs of America (DECA), (Approval of a Mid-Management Coordinator is required for admission).

Leadership Development II (1-1)

This course is a continuation of MDMG 1101. Prerequisite: MDMG 1101 and consent of a Mid-Management Coordinator.

MDMG 1103 Leadership Development III (1-1) Credit: 1

This course is a continuation of MDMG 1102. Prerequisite: MDMG 1102 and consent of a Mid-Management Coordinator.

MDMG 1401 Mid-Management Internship I (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 station under the supervision of the college mid-management coordinator. Prerequisites: Credit or current enrollment in BUSS 1301, MGMT 1305, and MGMT 1306.

Mid-Management Internship II

(1-20) Credit: 4

This course is a continuation of Mid-Management Internship I. Prerequisites: MDMG 1401 and current enrollment or credit in MGMT 2302.

MDMG 2301 Applications in Management Decision-Making

(2-2) Credit: 3

This is a course that emphasizes management decision-making skills that are necessary for the modern manager to successfully deal with resource problems in his or her place of business and career field. The course is designed for the student desiring to further his or her management training by applied learning techniques utilizing decision-making case studies and computer-assisted models. Prerequisites: MISC 1450 or COSC 1306, sophomore standing, and consent of the Department Manager.

Mid-Management Internship III (1-20)This course is a continuation of Mid-Management II. Prerequisites: MDMG 1402 and current

enrollment or credit in BUSS 2303 and MGMT 2309.

(1-20) Credit: 4

Mid-Management Internship IV This course is a continuation of Mid-Management III. Prerequisites: MDMG 2401 and current enrollment or credit in MGMT 2301 and BUSS 2304.

# Mid-Management Finance and Banking Option(FIBA)

(See Finance and Banking)

# Music (MUSI)

MUSI 1107 Choir

(1-2)Credit: 1

This course is recommended to all students who enter music courses, but it is open to all college students. Preparation for on-campus and public performances.

MUSI 1205 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, chords and triads, and exercises in melodic and harmonic dictation. Prerequisite: credit or enrollment in MUSI 1301.

MUSI 1206 Ear Training II

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 1205 and credit or enrollment in MUSI 1302.

**Music Fundamentals** MUSI 1301

(3-1)

An introduction to music through the audio-visual relative solimization method. Study of the pentatonic, modal, and diatonic scales, key signatures, intervals, triads, cadences, introduction to four-part writing. Ear training, sight singing, melodic dictation in simple and compound meters. Cadences and canons on the keyboard.

MUSI 1302 Music Theory (3-1) 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 dominances, sequences. Analysis of short works. Ear training, sight singing, dictation. Relative solmization method employed throughout. Cadences, canons, sequences on the keyboard. Prerequisite: MUSI 1301 or consent of instructor.

**MUSI 1303** Music Literature I (3-1) Credit: 3

A survey of the development of music from the end of the Ancient World to the present time, with an in-depth study of the music from the 15th century through the 19th century. Principal forms, periods and composers and the literature of each of the historical periods.

Music Literature II

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.

**Music Appreciation MUSI 1305** 

(3-0)

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.

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. Prerequisites: credit or enrollment in MUSI 2201 and MUSI 1302, or consent of instructor.

MUSI 2401 Intermediate Harmony

A study of the harmonic materials of the 18th and 19th centuries through analysis and Figured Bass exercises. Dominant and secondary seventh chords, secondary dominants, the diminished seventh chord, altered chords, nonharmonic tones. Melody harmonizations. dictation. Sequences with seventh chords on the keyboard. Prerequisite: MUSI 1302.

MUSI 2402 Advanced Harmony

(3-2) Credit: 4

The study of harmony as an organizing element of the large-scale musical structure. Diatonic, chromatic and enharmonic modulations. Melody harmonizations, analysis of larger works. harmonic dictation. Modulations to related and distant keys on the keyboard. Prerequisite: MUSI 2401.

# Music, Applied (MUSI)

MUSI 1101 Class Piano I

(0-1.5)

Introduction to the keyboard, the study of Mikrokosmos Vol. I by Bartok, easy selections from the classic, romantic, and contemporary piano literatures. Memory work is emphasized throughout. Scales up to 4 key signatures. One hour daily practice required. Prerequisite: credit or enrollment in MUSI 1301.

MUSI 1102 Class Piano II (0-1.5)

A continuation of Class Piano I. Technique scale and arpeggios to 4 key signatures, selected Czerny studies. Literature: Little Dances by Bach, a classic Sonatina, selections from the romantic and contemporary piano literature. Memory work is emphasized throughout. One hour daily practice required. Prerequisite: MUSI 1101 or consent of the instructor.

### MUSI 1103 Class Piano III

(0-1.5) Credit: 1

For students with a considerable keyboard skill. All scales and arpeggios on 4 octaves, Czerny studies. Literature: short preludes and two-part inventions by Bach, a classic Sonatina or Sonata, romantic and modern compositions. Memory work is emphasized throughout. 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 1201.

MUSI 1104 Class Piano IV

(0-1.5) Credit: 1

A continuation of Class Piano III. All scales on 4 octaves in thirds, sixths, and the octave. Major, minor, dominant and diminished seventh, arpeggios. Literature: short preludes and two-part inventions by Bach, a classic Sonatina or Sonata, romantic and modern compositions. Memory work is emphasized. One hour minimum daily practice is 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 1201. Prerequisite: MUSI 1103 or consent of the instructor; credit or enrollment in MUSI 1302.

MUSI 1201 Private Piano I

(0-1) Credit: 2

Private Piano. Technique: Czerny's School of Velocity and scales and arpeggios. Repertoire: two and three part inventions by Bach, Sonatas of Scarlatti, a complete classic Sonata, works by composers from the 19th and 20th centuries. All work is to be memorized. One 45-minute lesson per week. Two hours daily practice required. Prerequisite: MUSI 1103 or MUSI 1104 or audition, credit or enrollment in MUSI 1302.

MUSI 1202 Private Piano II

(0-1) Credit: 2

A continuation of Private Piano I. One 45-minute lesson per week. Two hours daily practice required. Prerequisite: MUSI 1201.

MUSI 2201, 2202 Private Piano III & IV

(0-1) Credit: 2, 2

Technique includes all scales and arpeggios on 4 octaves and Člementi's Gradus ad Parnassum. Repertoire: WTC Preludes and Fugues by Bach, a Sonata by Haydn, Mozart, or Beethoven; etudes and preludes by Chopin; impressionistic and modern compositions; one movement of a standard Concerto. Student is required to memorize all material. One 45-minute private lesson per week. Two hours daily practice required. Prerequisite: MUSI 1202.

MUSI 2301, 2302 Advanced Private Piano I & II (0-1) Credit: 3, 3 Scales in all keys in double thirds. Repertoire: Partitas, Suites, Prelude, and Fugues by Bach. A Beethoven Sonata, works of Chopin, Liszt, Brahms, Debussy. Schumann. One complete standard Concerto. Student is requested to memorize all the material. One hour private lesson per week. Three hours of daily practice required. Prerequisite: MUSI 2202.

# Music, Voice (MUSI)

MUSI 1105, 1106 Class Voice I & II

(0-1.5) 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. The literature is quite simple and undemanding. Prerequisite: credit or enrollment in MUSI 1301.

MUSI 1203, 1204 Private Voice I & II

(0-1.5) 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, Italian, and for more advanced students, German and French. Prerequisite: MUSI 1106 and/or audition.

MUSI 2203, 2204 Private Voice III & IV

(0-1) Credit: 2, 2

A continuation of MUSI 1203 and 1204. More difficult songs from the classic and romantic literature, oratorio and operatic arias, modern French songs, 20th century American songs. One 45-minute private lesson per week. Prerequisite: MUSI 1204.

# Nursing (NURI)

NURI 1901 Fundamentals of Nursing

(4-20) Credit: 9

This course provides an overview of the health care field and the role of the nurse as a member of the health care team. Instruction is designed to assist the student in developing knowledge in the areas of communication, interpersonal relations, growth and development, psychological aspects of patient care, health teaching, safety, asepsis technical skills, pharmacology, basic mathematics, nutrition, nursing process, nursing history, trends, legal aspects, and self evaluation. Area hospitals and health agencies, and various community agencies provide opportunity for clinical experience and/or observation.

NURI 1902 Medical-Surgical Nursing I

(4-20) Credit: 9

This course is a development of knowledge, skills, and attitudes necessary for assessing, planning, implementing, and evaluating the nursing care of adult patients with medical and surgical problems. Includes study of disease processes involving all body systems, diet therapy, pharmacology, prevention, rehabilitation, legal aspects, and mental health concepts. Prerequisite: NURI 1901, BIOL 1405, and PSYC 2301.

NURI 1903 Maternal & Child Health Nursing (4-20) Credit: 9
The mother, child, and family are considered as a community unit in this course. Experience in the nursing care of the mother during pregnancy, delivery and post-partum periods, and the infant during the neonatal period are included, as well as selected experiences with the well child. Emphasis is placed on the different needs of children with illness due to the influence of developmental stages and pathological conditions. Family planning, health teaching and family problems of daily living are also discussed. Prerequiste: NURI 1902, BIOL 1406, and PSYC 2303.

NURI 2101 Nursing Trends Seminar

(1-0) Credit: 1

This course is designed to ease the transition from student to graduate status through exploration of patterns of patient care, areas of employment, legal and professional responsibilities, current issues and trends. The seminar method is used throughout. Prerequisite: Sophomore standing.

NURI 2301 Psychiatric Nursing

(1-6) Credit: 3

This course focuses on the role of the nurse in the prevention and treatment of psychiatric conditions. The treatment modes available to the emotionally ill are studied; and the student is guided in the technique of interpersonal and intergroup relationships. This course is offered in a six week summer session. Prerequisite: Sophomore standing.

NURI 2901 Medical-Surgical Nursing II

(4-20) Credit: 9

Through lecture, seminars, and audiovisual aids, students learn more advanced physiological and nursing concepts. Focus of this course is in-depth adaptation of these concepts to the nursing process in caring for patients with more complicated medical and surgical nursing problems. Services of other health team members and agencies are incorporated by the student in patient care during and following hospitalization. Independent problem-solving and time management are emphasized to prepare students for graduate role. Experience in team-nursing, both as team leader and member is vehicle for such preparation. Prerequisite: NURI 1903, BIOL 2404.

# Occupational Safety and Health Technology (OSHT)

OSHT 1301 Safety Program, Organization (2-2) Credit: 3 and Administration

This course emphasizes the practices, principles, and techniques of managing and administering an industrial safety program to include general safety, industrial hygiene, and hazardous waste responsibilities.

OSHT 1302 Safety and Health Standards, Regulations, and Codes

(2-2) Credit: 3

A course designed to teach the students how to use, research, and interpret the OSHA Safety and Health compliance standards, Life Safety Code, industrial hygiene regulations, and hazardous waste regulations. The students will use the regulations, codes and standards in laboratory exercises.

OSHT 1303 Power Source Hazards Control (2-2) Credit: 3

A study of hazards of basic machine motions and the inherent hazards of unguarded machines. The course includes studies of basic types of guards and the principles and techniques of guarding. The hazards associated with explosives and compressed gases are also covered.

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### **OSHT 1401** Industrial Chemical Hazards

(3-3) Credit: 4

This course is designed to relate the basic chemical and physical properties of industrial chemicals to those hazards involved with their processing, storage, handling, and use. Flammable liquids, explosives, and pesticides are also covered. The potential dangers associated with hazardous and toxic wastes are briefly covered and the requirements of the Resource Recovery and Conservation Act are introduced. Prerequisites: CHEM 1400.

# OSHT 2301 Recordkeeping and Accident Investigation

(2-2) Credit: 3

This course introduces the student to OSHA recordkeeping rules and to the precise recordkeeping terminology involved. Accident investigation techniques are presented in detail, with practical experience in the methods of investigation. Analysis systems are introduced. Prerequisites: OSHT 1301.

### OSHT 2302 Environmental Health

(2-2) Credit: 3

An introductory study dealing with the health hazards of industrial operations. Chemical, physical, economic, and biological stresses of the workplace are studied. Hazardous waste disposal is introduced, with emphasis on generators of hazardous waste. Identification and listing of hazardous wastes is included. An overview of sanitation and public health is also presented. A brief study of the systems of the human body, with emphasis on the routes of entry of toxic substances, is undertaken. Prerequisite: OSHT 1401.

# OSHT 2303 Occupational Safety Engineering Techniques

(2-2) Credit: 3

An introduction to the methods of recognizing potentially hazardous situations in the work environment and measures used to correct such situations. Course covers techniques of systems safety concepts. This course also includes basic concepts of industrial engineering as it applies to an analysis of safe work procedures. Prerequisite: OSHT 1302.

### OSHT 2304 Contingency Planning

(2-2) Credit: 3

A study designed to consider the actions before, during, and immediately after an emergency occurs. This includes plans for the protection of people, equipment, and plant facilities during emergencies, as well as the broader aspects of the protection of the community of larger geographical areas. Working with the American Red Cross, local hospitals, and governmental defense agencies, a written over-all disaster plan is reviewed and updated. Prerequisites: OSHT 1301 & OSHT 1302.

### OSHT 2305 Occupational Safety and Health Management

(2-2) Credit: 3

This course is designed to teach the proper methods and techniques of organizing a plant safety program to include the inspection and control procedures, human factor engineering, human behavior, and safety training techniques. Performance measurement standards will be stressed, such as safety effectiveness measurement scales, intermodular measures, organic measures, and future performance measures. The auxiliary functions of a safety department will be examined and explained. Prerequisite: OSHT 2303.

#### OSHT 2306 Safety Planning, Layout, and Arrangement

(2-2) Credit: 3

Designed to give the student a practical course in plant construction, remodeling, and plant layout as it relates to current OSHA regulations. Safety requirements for building exits and stairs (Life and Safety Code), floor openings, hazardous operations, sanitation and health conditions, illumination standards, ventilation, dust collection systems, and functional use of color dynamics.

### OSHT 2401 Instrumentation and Analysis

(3-3) Credit: 4

This course is designed to qualify safety technicians in the techniques of evaluating occupational environmental health hazards. Instruments will be used to take air samples in various workplaces for air contaminants and particulates. These samples will be recorded, evaluated, and analyzed. The gas laws, systems of measurements, and standards will be studied. A review of mathematics and units used in industrial hygiene will be conducted in the course. Prerequisites: OSHT 1301 & OSHT 1302.

### OSHT 2402 Occupational Disease Control

(3-3) Credit: 4

A study of environmental energy and chemical hazards, including gases, vapors, fumes, dusts, and mists. Also stresses the importance of protective clothing and equipment when physical corrections cannot be made. The course includes basic concepts of chemistry and physics that are fundamental to the control of chemical and energy hazards. The course also includes the principles of ventilation control. Prerequisites: OSHT 1301 & OSHAT 1302.

# Office Administration (OADM)

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 II and Beginning Typewriting. Students will increase typing accuracy and speed. Prerequisite: OADM 1303 or OADM 1232 or ability to type 25 wpm for five minutes with no more than five errors.

OADM 1232 Beginning Typing II

(1.5-1.5) 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 to 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 of 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 more demanding content will be instructed.

OADM 1305 Clerical Practice

(2-1) Credit: 3

Procedures of filing and finding operations employed in business offices, standard filing systems. Training in the operation of transcribing machines and dry copy machines. Training in proficiency in handling the mail, telephone techniques, and handling receptionist duties. Considerable emphasis and training in integrating these activities into an office environment will be instructed.

OADM 1306 Secretarial Practice

(3-1) Credit: 3

This course is designed for the student who wishes to prepare for a career as an executive secretary. More advanced mailable letters, transcribing machines, organization of meetings and conferences, travel arrangements, information sources, and human relations skills are studied. Students are trained in word processing procedures. Students are introduced to various "needs" theories such as Abraham Maslow's hierarchy of needs. Students are guided into the solution of office problems due to personality problems. Group work, group dynamics, and student evaluations are utilized extensively in this course.

OADM 1307 Word Processing

(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 provides hands on experience with word processing equipment to include processing, editing, storing information, printing devices, formatting, type style, and paragraphing. Prerequisite: Minimum typing skill of 40 GWAM.

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. Typing ability and sound background in English are strongly recommended.

# OADM 1309 Business Mathematics and Calculating (3-3) Credit: 3 Machines

Technique familiarization in the operation of the most commonly used office machines: Computations; calculations, speed drills; percentages, discounts and net values, chain discounts, business forms. Emphasis will be placed on business mathematics.

### OADM 2301 Advanced Shorthand

(3-3) 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. Prerequiste: OADM 1302 or equivalent.

OADM 2302 Advanced Typewriting

(3-3) Credit: 3

This course includes advanced work in such specialized production as tabulation, inter-office correspondence, manuscripts, telegrams, stencil cutting and mimeograph operation, legal forms, medical forms, special inter-office forms, and additional work on the arrangement of business letters with special features.

OADM 2303 Advanced Word Processing/Transcription (3-3) Credit: 3 This course is designed to train students in the advanced theory of word processing and transcription techniques. The students will work with advanced problems utilizinh hands-on experience with word processing facilities and equipment. Hands-on experience includes the following: review of machine transcription, editing, storing information, printing, formatting, type styling, and paragraphing. Computational capabilities, advanced application of the word processing training received in OADM 1307 Word Processing and office-type filing procedures for software will be studied. A thorough study of present and future systems, i.e. interchangeability and adaptability will also be presented. Prerequisite: OADM 1307.

OADM 2304 Bookkeeping I

(3-3) Credit: 3

Elementary principles of bookkeeping, journalization; posting, statements, special journals; subsidiary ledgers. Special emphasis is placed on personal, family and small business accounting systems.

OADM 2305 Bookkeeping 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; payroll records and payroll taxes; introduction to partnership accounting; special journals and ledgers; business papers and business procedures relating to accounting voucher system. Prerequisite: OADM 2304 or equivalent.

OADM 2307 Office Administration and Procedures (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 the various systems that affect the modern office. Prerequisite: Sophomore standing or consent of the instructor.

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: typewriting, filing, duplication, use of telephone, preparation of correspondence, voice transcription machine, record-keeping, proofreading, etc.

OADM 2309 Office Administration Internship (1-5) Credit: 3
Students will be provided a combination of occupational related classwork instruction and on-the-job training in cooperation with Office Administration offices and other campus offices. Students will demonstrate advanced competencies with work experiences in the following areas: taking dictation, typewriting, 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.

# Office Assistant

(See Office Administration)

# Offset Printing (OPRT)

OPRT 1301 Introduction to Offset Printing

(2-4) Credit: 3

This course offers the student an introduction to 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 relates to the total plant operation.

OPRT 1302 Camera & Darkroom Procedures Stripping & Platemaking I

(2-4) Credit: 3

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.

OPRT 1303 Offset Press Operation I.

(2-4) Credit: 3

Basic theory and techniques in the operation of the small (duplicator) offset press, including the "offset principle", feeding of all types of stock, image position, sheet delivery, and the maintaining of correct image density.

OPRT 1304 Bindery Operations, Cost Estimating & Pricing.

(2-4) Credit: 3

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 this 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.

OPRT 1305 Copy Preparation & Layout.

(2-4) Credit: 3

A study of various methods of producing body and display type is conducted. Students are taught the operations for producing both body and display type and procedures for basic copy layout and pasteups. Prerequisite: OPRT 1301 or OPRT 1302.

OPRT 1306 Camera & Darkroom Procedures, Stripping & Platemaking II. (2-4) Credit: 3

Advanced theory and techniques of line copy reproduction, with emphasis on halftone reproductions, including duotone color and multi-color stripping and plate processing of line copy. Prerequisite: OPRT 1302

OPRT 1307 Offset Press Operation II.

(2-4) Credit: 3

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 1303.

**OPRT 1308** Offset Printing Equipment Maintenance (2-4) Credit: 3 A thorough study of the adjustments, preventative maintenance and simple repair of darkroom, composing room, press room, and bindery equipment. Prerequisite: OPRT 1301 or OPRT 1303.

# Petroleum Technology (PETT)

PETT 1301 Introduction to Petroleum Technology

(3-0) Credit: 3

General study of the industry, including history of the industry, chemistry of petroleum, its occurrence in nature and its importance in the world economy, leasing and royalty exploration, drilling and production methods, conservation, transportation and refining, economics of the oil industry.

PETT 1302 Petroleum Geology

(3-0) Credit: 3

A rapid survey course covering the principles of petroleum geology. Topics covered are geographic and stratigraphic distribution, types of structures, properties of petroleum, origin of petroleum, methods of migration, and petroleum discovery methods. Different fields are studied to determine the characteristics of fields as based on different types of traps.

PETT 1303 Rotary Drilling Fluids

(3-0) Credit: 3

Testing methods, determining drilling fluid characteristics, drilling fluid problems, use of special drilling fluids, laboratory exercises consisting of practice in altering the properties of fresh water and special drilling fluids for drilling through troublesome zones with the rotary system.

### PETT 1304 Oil Field Records

(3-0) Credit: 3

A study of records kept by oil companies and reports made within companies and to the regulatory agencies.

PETT 1401 Rig & Drilling Equipment

(3-3) Credit: 4

Technical information covering the care and use of drilling equipment, hoists, power units, derricks, pumps, and derrick equipment. Trips to examine different types of drilling equipment in actual operation in the field. Also trips to service companies to study their drilling tools.

PETT 1402 Petroleum Logging & Mapping

(3-3) Credit: 4

A study of theories of electrical, micro-electrical radiation, optical chemical, and mechanical well logging methods and application of these theories, field examples and problems.

PETT 2301 Pumping Equipment

(3-0) Credit: 3

A theoretical study of the motors, engines, compressors, and pumps used in the movement of petroleum products; including a survey of the different types of equipment available for specific conditions and loads.

PETT 2302 Well Completion Methods

(3-0) Credit: 3

Included in this course are basic types of completion methods, such as open hole, liner and screen, perforated casing. Permanent type completions and multiple completions are studied. Remedial measures including recompletion, shutting off bottom hole water, reducing high gas oil ratios, sand control, fracturing, and redrilling are studied.

PETT 2303 Natural Gas Production

(3-0) Credit: 3

A survey course in the handling of natural gas from discovery to use; with emphasis on efficient transportation and the use of proper equipment for distribution. Gas regulations, control and measuring devices will be studied.

PETT 2304 Petroleum Transportation

(3-0) Credit: 3

A study of the methods and practices of transporting crude and refined petroleum products by pipeline, tanker and by land.

PETT 2305 Petroleum Pollution Control

(3-0) Credit: 3

A study of the various contaminants of air, water, and soil and their effect on ecology. The types of contaminants released by the petroleum industry and petroleum products to the air and water, and methods used to minimize them will be studied. A survey of the various pollutants, their effects on materials, and their control.

PETT 2306 Hydraulics

(3-0) Credit: 3

A study of hydraulics related to drilling, oil pipelines, and artificial lift.

PETT 2307 Refinery Operations

(3-0) Credit: 3

A study of theoretical and practical approaches to the operation of refinery.

PETT 2401 Petroleum Production Methods

(3-3) Credit: 4

Various elements of crude oil production are studied, including subsurface pumps, gaslifting, emulsion treating, separation of oil and water, separation of oil and gas. Instrumentation of leases is discussed, including flow-meters, automatic lease operation, and automatic custody transfer; also a study of oil field corrosion problems, and secondary recovery methods.

PETT 2402 Petroleum Refining Methods and Operations (3-3) Credit: 4
The chemical structure of the hydrocarbon is studied in this course. A survey of modern refining methods of gasoline, petrochemicals and other related chemicals is included.

# Philosophy (PHIL)

PHIL 2301 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 2302 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 2303 Logic

(3-0) Credit: 3

Nature and methods of correct reasoning; deductive proof; inductive proof; fallacies; arguments.

PHIL 2304 Old Testament History and Philosophy (3-0) Credit: 3 A general survey of the Old Testament as to origin, literature, and history with special study of the institutions, religions, and national life of the Hebrew people.

PHIL 2305 New Testament History and Philosophy PHIL 2305 New Testament History and Philosophy (3-0) Credit: 3
The course will consist of a survey of all the New Testament Literature. The Synoptic Gospels, the Johanine 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.

# Photography (PHOT)

PHOT 1301 Introduction to Photography (2-4) Credit: 3

The course emphasizes the handling of small cameras, film exposure, processing, contact printing, and basic enlarging. Flash and existing light photography is studied with news features, action photography, and storytelling photographs. Printing and composing photographs for publications is included.

PHOT 1302 Portrait Photography

(2-4)Credit: 3 A study is made of fundamental lighting, camera techniques, posing, composition, processing, and printing as applied to portraiture. Experience in retouching negatives and prints, mounting and making storytelling pictures for fashion and advertising is provided. Prerequisite: PHOT 1301 or consent of instructor.

PHOT 1303 Advanced Photography (2-4)Credit: 3

The course includes elements of composition and film exposure development for specific gamma, studied 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 1301 or consent of instructor.

PHOT 1304 Commercial Photography (2-4) Credit: 3

A study is made of the 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 party photography. Emphasis on what a commercial photographer does, how he sets up a business, what equipment he needs, how he finds clients, what prices to charge, and new trends in the field are reviewed. Prerequisites: PHOT 1301 and 1302 or consent of instructor.

Advanced Print Making

(2-4) Credit: 3

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: PHOT 1301,1302,1303 and 1304 or consent of instructor.

Print Enhancement

(2-4) Credit: 3

The course will improve the student's ability to correct flaws in photographic prints and to mask photographs by removing or adding colors to prints. The understanding and utilization of proper air brushing and other techniques and processes will provide the student with an ability to better display photographic work.

PHOT 1400 Photography as a Communicative Art (3-2) Credit: 4

This course covers the history of photography and the general techniques and technical processes of still photography.

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 story-telling photographs. Printing and composing photographs for publications included.

Portrait Photography PHOT 1402

(3-2) Credit: 4

A study is made of fundamental lighting, camera techniques, posing, composition, processing, and printing as applied to portraiture. Experience in retouching negatives and prints, mounting and making story-telling pictures for fashion and advertising is provided. Prerequisite: PHOT 1401 or consent of instructor.

(3-2) Credit: 4 Advanced Photography PHOT 1403

This course includes elements of composition and film exposure development for specific gamma studied sensitometry, advanced photographic printing characteristics of printing papers, processing for contrast, print balance, and toning. Principles of filters and lenses and advanced focusing techniques are studied. Prerequisite: PHOT 1401 or consent of instructor.

Commercial Photography (3-2)

A study is made of the 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 party 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: PHOT 1401 and PHOT 1402, or consent of instructor.

Advanced Printmaking PHOT 1405

(3-2)Credit: 4 This course includes special instruction and laboratory work in advanced printmaking, mounting, display, toning and tinting and special procedures in graphic techniques in printmaking with higher contrast materials. Preparation of a black and white portfolio is included. Prerequisites: PHOT 1401, PHOT 1402, PHOT 1403, PHOT 1404 or consent of instructor.

Color Photography I

(3-2)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.

Color Photography II PHOT 1407

(3-2)Credit: 4

Positive and negative color film processing, sensitometry, and color printing. Prerequisite: PHOT 1406.

PHOT 2403 Portrait Retouching (3-2)Credit: 4

Portrait negatives retouched by the use of leads, dye 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

(3-2) 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: PHOT 1401, PHOT 1402, PHOT 1404, PHOT 1406, and PHOT 1407.

Physical Education (PYED)

PYED 1100	Football and Basketball	$\{1-2\}$	Credit: 1
PYED 1101	Volleyball and Softball	[1-2]	Credit: 1
PYED 1102	Beginning Badminton	[1-2]	Credit: 1
PYED 1103	Beginning Bowling	(1-2)	Credit: 1
PYED 1104	Soccer	(1-2)	Credit: 1
PYED 1105	Folk and Square Dancing	(1-2)	Credit: 1
PYED 1106	Beginning Swimming	(1-2)	Credit: 1
PYED 1107	Beginning Tennis	(1-2)	Credit: 1
PYED 1108	Beginning Golf	(1-2)	Credit: 1
PYED 1109	Basketball and Soccer	(1-2)	Credit: 1
PYED 1110	Karate	(1-2)	Credit: 1
PYED 1111	Roller Skating	(1-2)	Credit: 1
PYED 1112	Angling	(1-2)	Credit: 1
PYED 1113	Country Western Dance	<b>(1-2)</b>	Credit: 1
PYED 1114	Volleyball	(1-2)	Credit: 1
PYED 1115	Basketball	(1-2)	Credit: 1
PYED 1116	Individual Physical Education	•	
	Activity	(1-2)	Credit: 1

PYED 1117	Hunting	(1-2)	Credit: 1
PYED 1118	Jogging	(1-2)	Credit: 1
PYED 2100	Advanced Bowling	(1-2)	Credit: 1
PYED 2101	Advanced Swimming	(1-2)	Credit: 1
PYED 2102	Intermediate Tennis	<b>(1-2)</b>	Credit: 1
PYED 2103	Advanced Golf	(1-2)	Credit: 1
PYED 2104	Tumbling	(1-2)	Credit: 1
PYED 2105	Figure Development	(1-2)	Credit: 1
PYED 2106	Advanced Badminton	(1-2)	Credit: 1
PYED 2107	Modern Dance	(1-2)	Credit: 1
PYED 2108	Physical Conditioning	(1-2)	Credit: 1
PYED 2109	Aerobics	$\{1-2\}$	Credit: 1

PYED 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.

PYED 1302 Foundations of Health

(3-0) Credit: 3

A fundamental course in principles and problems of healthful living. Emphasis on current information and thought to be applied to individual daily lives.

PYED 2301 Sports Officiating

(3-0) Credit: 3

Theory and practice in techniques of officiating. Officiating experience.

PYED 2302 Safety and 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.

# Physics (PHYS)

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, one hour of recitation, and two hours of laboratory per week. Prerequisite: MATH 1303 or registration therein.

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 instructor.

PHYS 1403 Survey of Physics

(3-3) Credit: 4

A survey of the fundamental principles of physics designed to acquaint students with the basic concepts of physics, contemporary physics, and modern thinking.

PHYS 2401 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, one hour of recitation, and two hours of laboratory per week. Prerequisite: MATH 2301 or registration therein.

PHYS 2402 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, one hour of recitation, and two hours of laboratory per week. Prerequisite: PHYS 2401 or equivalent.

# **Plant Production**

(See Farm and Ranch Mgmt.)

### Pre-Med

(See Biology, Chemistry)

# Psychology (PSYC)

PSYC 1101 College Orientation

(1-0) Credit: 1

This course is designed to assist the student to recognize and develop aptitudes, interests, and abilities; to make adequate personal and social adjustments to college life; and to become acquainted with Central Texas College policies, services and activities. This course will familiarize students with the library and the use of references, texts, and other materials contained in the library. This course is required of all beginning students taking 12 semester hours or more and of all transfer students with less than 24 hours of earned credit.

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. Recommended for students of sophomore standing.

PSYC 2302 Personality Adjustment

(3-0) Credit: 3

A study of psychological concepts and principles related to healthy personality and social adjustment.

PSYC 2303 Child Growth & 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; problems of adjustment.

## Real Estate (REAE)

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-valued 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 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 Department Manager.

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 coorelations; 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: MATH 1307, REAE 1301 or consent of Department Manager.

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 Department Manager.

#### 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 applications-progress 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 Department Manager.

#### 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; acknowledgements; and 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 in order 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 with the Mid-Management Department as to whether the Texas Real Estate Commission will accept credits toward license requirements.

REAE 2307 Commercial Real Estate 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: MATH 1307, REAE 1301 or consent of Department Manager.

#### REAE 2308 Real Estate Investments

(3-0) Credit: 3

This course shall include an analysis of real estate investment, characteristics, techniques of investment analysis, time-valued 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 1301, MATH 1307, or REAE 1300, REAE 2304, or approval of the Department Manager.

REAE 2401 Real Estate Internship I

(1-20) Credit: 4

This course consists of on-the-job training in the real estate profession that utilizes the principles, skills, and knowledge gained in the theoretical setting of the classroom. The student works at an approved work station under the supervision of a college coordinator. Prerequisite: Sophomore standing or consent of the Department Manager.

REAE 2402 Real Estate Internship II

(1-20) Credit: 4

This course is a continuation of Real Estate Internship I. Prerequisite: Sophomore standing or consent of Department Manager.

# Recreation (RECR)

RECR 1301 Foundations of Recreations

(3-0) Credit: 3

Development, structure, purposes, and functions of the professional fields in recreation.

RECR 1302 Principles of Recreational Leadership (3-0) Credit: 3
Development of skills and leadership ability in various program areas of recreation.
Observation of programs sponsored by city recreation, boys clubs, and armed forces.

RECR 1303 Theory & Practice of Teaching Sports (3-0) Credit: 3 Designed to teach the student evaluation procedures, rules, and improvement of skills. Emphasis is on methods and materials.

RECR 2301 Camp Counseling

(3-0) Credit: 3

Understanding the child in camp setting, techniques of cabin counseling, general aspects of programming, camperaft, nature study, and social and physical recreation appropriate to camp programs.

RECR 2302 Program Planning for Recreation (3-0) Credit: 3
Designed to teach the student procedures, techniques, and methods in planning, developing, and implementation of a recreation program.

RECR 2303 Theory & Practice of Teaching Aquatics (3-0) Credit: 3 Basic skills, professions, and safety techniques in swimming and water safety. Emphasis on methods and materials.

RECR 2304 Outdoor Recreational Sport

(3-0) Credit: 3

A course designed to equip the student with the knowledge, skills, and appreciation of the outdoor recreational sports, games, and activities needed to organize and administer a varied program of recreation.

RECR 2305 Field Work in Recreation

(3-0) Credit: 3

Working in an assigned recreation program under supervision. Course includes observations, participation, and supervised leadership.

### Science

(See Biology, Chemistry, Geology)

EASC 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.

GESC 1301 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.

## Small Gas Engine Repair (SGER)

SGER 1400 Shop Practice & Safety

(3-3) Credit: 4

A course designed to provide the student with basic small engine skills involving safety, use of manuals, measuring devices, fasteners, hand and power tools, thread repair, soldering and engine cleaning methods.

SGER 1401 Gas Engine Fundamentals

(2-4) Credit: 4

This course is 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 to 8 HP engines. Prerequisite: SGER 1400.

SGER 1407 Small Gas Engine Service

(2-4) Credit: 4

This course provides the student with "hands on" experiences in the repair and overhaul of small gas engines. Emphasis will be placed upon valve reconditioning, magnetos, and ignition repair, carburetor overhaul, crankshaft replacement and other types of service requirements. Prerequisites: SGER 1400, SGER 1401.

SGER 1408 Chain Saw Service and Repair

Credit: 4 (2-4)

This course provides the student with the theory and repair skills necessary to service all types of modern chain saws. Areas of study will include preventative maintenance, chains, guide bars, sprockets, clutches, fuel, ignition and lubrication systems. Prerequisites: SGER 1400, SGER 1401.

SGER 1409 Motorcycle Service

(2-4)

This course is designed to provide the student with the necessary skills to perform preventative maintenance, and an understanding of the theory and operation of two and four stroke motorcycle engines. Study will include the battery, electrical, fuel, tune-up, drive-line and brake systems. Prerequisites: SGER 1400, SGER 1401.

Shop Organization and Management (3-0) Credit: 3 This course is designed to provide the student with an understanding of small engine repair in business management. Areas of study includes customer relations, warranty provisions, service salesmanship, organization and shop layout, and the financial and operational aspects of managing a small engine repair business. Prerequisite: Sophomore standing,

**SGER 2407** Off-Road Small Engine Repair and Service

(2-4) Credit: 4

This course provides the student with experiences in the maintenance and repair of minibikes, go-carts, snowmobiles, mobile generators, farm equipment and other small engine applications. Prerequisite: Sophomore standing.

SGER 2408 Outboard Motor Service and Repair (2-4) 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.

Motorcycle Repair

(2-4) Credit: 4

This course is designed to provide the student with the necessary skills to disassemble, repair, replace, and assemble motorcycle engines, drive train components, transmission, and suspension systems. Special emphasis will be placed on special tools and test equipment. Prerequisites: SCER 1400, SGER 1401, SGER 1409.

(2-4) Credit: 4 SGER 2410 Lawn and Garden Equipment Service This course is designed to provide the student with "hand on" experience in the repair of all types of power lawn care units including law mowers, riding mowers, garden tractors, tillers and other similar small engine applications. Skills employed will utilize both oxy-gas and arc welding equipment when necessary. Prerequisites: SGER 1400, SGER 1401, SGER 1407, WELD 1401. Co-requisite: WELD 1402.

### Social Science

(See Anthropology, Geography, Government, History, Philosophy, Psychology, Sociology)

# Sociology (SOCI)

SOCI 2301 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.

**Contemporary Social Problems** (3-0) Credit: 3 Identification and analysis of contemporary social problems, development of criteria for evaluating problems for social betterment.

Criminology (3-0) SOCI 2303 Causes 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.

(3-0) Credit: 3 SOCI 2304 Social Institutions & Processes Sociological concepts and principles that are basic to an understanding of the complexity of modern society. Students, through firsthand observation and course materials, are familiarized with social institutions, class structures, and social processes which produce social organization and disorganization. Major social institutions are viewed from the standpoint of social structure and social processes, and their future roles in society's operation and influence upon the individual and groups.

Social Psychology **SOCI 2305** 

Credit: 3

The origin and development of personal behavior in interpersonal situations.

Marriage and the Family SOCI 2306

(3**-**0)

A study of problems in courtship, marriage, and family living as they relate to the social structure of American society.

Introduction to Social Work SOCI 2307

(3-0)Credit: 3

This course covers the development of the philosophy and practice of social work in the United States. Also included is a survey of the various social work occupations and techniques utilized in social work.

**American Minorities** SOCI 2308

(3-0)Credit: 3

The principal minority groups in American society and their sociological significance problems of intergroup relations, social movements, and related social changes occurring on the contemporary American scene.

# Solar Energy (SESY)

Solar Heating and Cooling Systems (3-3) Credit: 4 SESY 1401

This course is an introduction to solar heating and cooling systems. Topics of instruction will include an overview of this basic system components of both solar heating and solar cooling systems, and the operation, installation, maintenance, trouble-shooting, and service procedures of solar heating and solar cooling systems. Prerequisites: AIRC 1403 and AIRC 1404.

SESY 2401 Solar Systems Design (3-3)

This course is an introduction to solar systems design. Topics of instruction will include an overview of the basic architectural design of the structures to collect, store and distribute the heat to various parts of the structure by natural means. Prerequisite: SESY 1401.

SESY 2402 Solar Energy Special Projects (1-5)

This course covers practical experience on a special project(s) involving an application of solar energy heating and/or cooling systems. Under the supervision of the instructor, the student selects a project that includes the design, fabrication, installation, calibration, operation and maintenance of a solar system. Solar energy systems standards, local building code requirements and cost analysis are also included. Prerequisites: SESY 1401, SESY 2401.

# Spanish (SPAN)

Beginning Spanish I SPAN 1401

(3-3) Credit: 4

This course consists chiefly of the study of Spanish grammar and development of vocabulary. Conversation in Spanish is stressed.

SPAN 1402 Beginning Spanish II (3-3)Credit: 4

This course is a continuation of Beginning Spanish I, with continued emphasis on conversation. Prerequisite: SPAN 1401.

SPAN 2301 Intermediate Spanish I

(3-0)

A review grammar text is used. Continued emphasis is placed on conversation, correct pronunciation, and correct writing. Readings from various Spanish-American authors are studied. Prerequisite: SPAN 1401, 1402, or two years of Spanish at an accredited high school.

SPAN 2302 Intermediate Spanish II

(3-0)

This course continues the readings from Spanish-American authors. Grammar, composition, and conversation are emphasized. Prerequisite: SPAN 2301 or equivalent.

# Speech (SPCH)

Public Speaking SPCH 1301

(3-0) Credit: 3

Research, composition, organization, and delivery of speeches for various purposes and occasions, including informative, persuasive, oral interpretation, and demonstration speeches. Positive support and feedback from audience members is stressed. Some study of principles and theories of public speaking

#### SPCH 1302 Voice & Diction

(3-0) Credit: 3

Physiology and mechanics of effective voice production with practice in articulation, pronunciation, and enunciation. Introduction to the International Phonetic Alphabet and regional dialects (accents). Practice in achieving vocal variety through the oral interpretation of literature.

SPCH 1303 Oral Interpretation

(3-0)

Study and practice in the principles of the oral reading of literature. Attention is paid to analyzing good literature and to recreating the logical and emotional content for an audience. Group oral interpretation is also studied.

SPCH 2303 **Business and Professional Speaking** (3-0)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 a problem solving discussion, and delivering speeches in public.

SPCH 2304 Discussion

group communication.

Credit: 3 (3-0)

Study of the principles of systematic investigation and reflective thinking as applied to discussion. Practice in discussion of current problems by use of various forms, round table, panel, sales conferences, committee, parliamentary and lecture-forum.

**Interpersonal Communications** (3-0) Credit: 3 Theory, examples and participation in exercises to improve effective one-to-one and small

# Telecommunications (TELE)

Introduction to Broadcasting (3**-0**) Credit: 3 This is a survey course tracing the history of broadcasting 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. Preparation for the FCC Radio-Telephone Operator's Third Class Permit is included in this course of study.

**Broadcast Sales** 

This course is designed to give the student a working knowledge of the broadcast time sales. Areas of study include sales call preparation, sales presentations, spot scheduling, client interviews, collections, rate cards and contracts, and sales promotion. Station ratings and their use in broadcast sales will also be studied.

**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 approval of the Department Manager.

TELE 1402 Beginning Radio Production In this course the fundamental techniques and practices of production and programming are emphasized with a great deal of practical experience in the KNCT-FM studios. 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.

Credit: 4 Beginning Television Production (3-3)**TELE 1403** 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 a daily live broadcast from a television station and other live and taped productions. A basic study of the operations of a television station will be covered.

Credit: 4 TELE 1405 Radio-Television Announcing (3-3) This course covers the duties and responsibilities of the announcer, such as operation of the 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 the KNCT-FM, KNCT-TV facilities.

### TELE 1406 Television Film

(3-3) Credit: 4

This course is designed to introduce the student to the fundamentals of cinematography and its applications in the television industry. Basic filming techniques will be covered, and each student will learn to shoot 16 mm motion picture cameras, edit, story board, and process film. Laboratory exercises will provide for the shooting of at least 200 feet of film per student.

TELE 2301 Technical Aspects of Broadcasting (3-0)\* Credit: 3
This course will help the student develop a broad technical vocabulary and a basic understanding of the technical aspects of Telecommunications. Emphasis is placed on the study of operating fundamentals and the technical limitations of telecommunications systems. Broadcast technical standards and their rationale are a major part of the course. Limited emergency maintenance techniques for production personnel are also taught.

TELE 2305 Broadcast Writing

(3-0) Credit: 3

This course covers the stylistic writing techniques as needed for commercial copy, promotional copy, news editing, radio-television show formats, and individualistic creative writing for drama or documentaries. Practical experience will be available through stations KNCT-FM and KNCT-TV.

TELE 2306 Telecommunications Seminar (3-0) Ci

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 of his chosen industry.

TELE 2402 Advanced Television Production (3-3) Credit: 4

This course offers advanced training in television production. Included will be experience as cameraman, floor director, talent, lighting, director, technical director, producer, graphics, film director, video tape operator, and audio engineer. Practical experience in weekly television program production will be available through the use of station KNCT-TV. In addition, a critical look will be given to television programming techniques, types of station structure, and innovative technological breakthroughs. Prerequisite: TELE 1403 or approval of the Department Manager.

TELE 2403 Advanced Radio Production

(3-3) Credit: 4

The major emphasis in this course is advanced training in the production of radio commercials, promotion announcements, documentaries, newscasting, and interviewing. An in-depth study of the programming formulas and different types of radio broadcasting is presented. Each student will be responsible for weekly programming to be aired over radio station KNCT-FM. Prerequisite: TELE 1402 or approval of the Department Manager.

TELE 2407 Electronic News Gathering

(3-3) Credit: 4

Electronic news gathering techniques are covered including mini-camera operations, electronic editing, principles, remote audio and lighting techniques. Students assist KNCT staff with remote production assignments.

TELE 2408 Telecommunications Practicum (1-8) Credit: 4

The purpose of this course is to give each student an opportunity to receive practical experience in a specialized area of study. A student may choose his individual study practicum from any of the following broadcast-related areas: Graphic arts, set design, photography, cinematography, broadcast journalism, radio production, television production, broadcast promotion, traffic and continuity. Prerequisite: TELE 1402 and TELE 1403 or approval of the Department Manager.

TELE 2409 Telecommunications Field Projects I (1-8) Credit: 4

The field projects will constitute an on-the-job training experience for all the students. The laboratory portion will place the student in responsible production positions for on-air broadcast activities on KNCT-TV and/or KNCT-FM. Each student will produce and direct at least three major TV or radio programs on a regularly scheduled basis. In conjunction with this practical training, the student will compile a daily log of his work experience for in-class discussion and criticism. Prerequisite: TELE 1402 and TELE 1403 or approval of the Department Manager.

TELE 2410 Telecommunications Field Projects II (1-8) Credit: 4
A continuation of TELE 2409, this course consists of on-the-job training as a production member of KNCT-TV or KNCT-FM for on-air operations. Prerequisite: TELE 2409.

### **Television Repair**

(See Consumer Electronics Servicing)

### Theatre

(See Speech)

# Transportation (TRAN)

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 of 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 in regulation of transportation, 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 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 freigh rates from the point of view of the shipper, carrier, and regulatory bodies.

TRAN 2302 Transportation Law and Regulation

(3-0) Credit: 3

This course covers the majors 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 II. 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 Rail 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.

TRANS 2307 Highway Transportation I

(3-0) Credit: 3

This is the beginning study of motor carrier rates including instruction in the use of freight classification and state tariffs.

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 interestate and intrastate tariffs. Prerequisite: TRAN 2307.

TRAN 2309 Airline Freight Transportation I (3-0)

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 II. 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.

# Turkish (TURK)

TURK 1401 Beginning Turkish

(3-3) Credit: 4

This course is for students who have had no previous training in Turkish. It includes a study of elementary grammar with oral and reading exercises. The oral exercises are designed to develop conversational ability.

**TURK 1402 Intermediate Turkish** 

(3-3) Credit: 4

This course introduces Turkish reading of average difficulty. It contains a review of Turkish grammar and continued practice in conversation. Prerequisite: TURK 1401.

# **Vocational Nursing**

(See Nursing)

### Voice

(See Music)

# Water System Technology (WATS)

WATS 1301 Water System Design and Operation

(3-0) Credit: 3

This course covers the use and operation of all major water works equipment to include pumps, wells, and meters.

WATS 1302 Instrumentation and Controls

(3-0) Credit: 3

This is a study of the hydraulic, pneumatic, mechanical, electronic control systems and components of the different types of water distribution systems. This course will consider partially automated and fully automated systems.

WATS 1303 Aquatic Biology and Water Chemistry (3-1) Credit: 3

A study of the physical and chemical characteristics of water and the theory and laboratory techniques for all control tests of water purification and analysis. Emphasis will be placed on the responsibilities of the water works operator.

WATS 1304 Water Quality Control

(2-3) Credit: 3

A study of basic principles of water purification covering the various methods of purification, design criteria, maintenance programs and operational problems.

WATS 1305 Plumbing Layout and Devices

(3-1) Credit: 3

This course introduces the student to plumbing symbols and abbreviations, blueprint reading, use of pipes, the fundamentals of pipe layout and special backflow prevention devices.

WATS 1306 Water System Hydraulics

(3-0) Credit: 3 This course covers the hydraulics involved in water systems operations. Prerequisite: TMTH

1300.

Advanced Instrumentation and WATS 1401 Controls

(3-3) Credit: 4

This course provides the student with basic electrical knowledge and an indepth knowledge of water systems controls. The student will troubleshoot and repair controls. Prerequisite: WATS 1302.

# Welding (WELD)

Basic Oxy Welding WELD 1250

(.2-2.3) Credit: 2

Instruction in selected types of weld joints and edge preparation includes safety requirements and maintenance of metal-working 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.

Beginning Gas Welding WELD 1401

(2-4)Credit: 4

Instruction will be conducted in oxy-acetylene welding theory and practical application. Course of study will include use and operation of oxy-acetylene cutting equipment. Safety and proper care of oxy-acetylene equipment will be stressed.

WELD 1402 Beginning Arc Welding

(2-4)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.

**Intermediate Arc Welding** 

(2-4)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 flat and horizontal positions with various types of electrodes. Prerequisite: WELD 1402.

WELD 1404 Beginning GMAW and GTAW (MIG & TIG) (2-4) Credit: 4 Theory and practice of Gas Metal Arc Welding and Gas Tungsten Arc Welding of mild steel. Course of instruction to include study of shielding gases used in these processes. Prerequisites: WELD 1401 and WELD 1402 or ATBR 1405.

Advanced Gas Welding and **WELD 1405 Cutting Processes** 

(2-4) Credit: 4

Instruction will be given on oxy-acetylene 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.

**Advanced Arc Welding** WELD 2401

(2-4) 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.

Beginning Pipe Welding WELD 2402

Credit: 4 (2-4)

Intensive classroom and practical applications will be given in techniques used in the welding of rolled and fixed position pipe. Prerequisite: WELD 1403.

Advanced GMAW and GTAW WELD 2403 (MIG & TIG)

(2-4) Credit: 4

Instruction to be given on Gas Metal Arc Welding, in all positions of mild steel and aluminum. Gas Tungsten Arc Welding course of study to include welding of stainless steel, aluminum and other exotic metals. Prerequisite: WELD 1404.

### WELD 2404 Advanced Pipe Welding

(2-4) 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 2405 Weld Testing and Inspection

(4-2) Credit: 4

Theory and practice of making basic destructive and non-destructive weld test. This will include guided bend, nick break, tensile, hardness, liquid penetrant, magnetic particle, and ultrasonic testing. Prerequisite: WELD 1403.

WELD 2406 Welding Fabrication and Layout (2-4) Credit: 4
Practical application of steel fabrication and general layout work. Blueprint reading of
welding prints with welding symbols will be included. Prerequisites: WELD 2401 and DRDS
1400.

## CONTINUING EDUCATION

The purpose of this non-credit program is to meet the continuing education requirements of the community. To achieve this purpose, organized programs of instruction are provided in response to expressed needs. Generally, classes 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 of the area and changing requirements of businesses, industries, and the desires of local citizens. There are not limits to the number or variety of courses. Classes are often offered in the vocational business field as well as practical arts. Area employees and businessmen are periodically consulted for recommendations as to types of courses needed. In addition, the appreciation of and participation in practical arts and vocational interests is encouraged. These courses are an important segment of the Continuing Education Program.

Additional information may be obtained by contacting the Director of the Evening College.

Typical courses are listed below:

#### Agriculture/Horticulture

Landscaping Horse Care and Management Vegetable Gardening Houseplants

#### Arts & Hobbies

Cake Decorating
Flower Arranging
Guitar I
Guitar II
Macrame
Crewel Embroidery
Needlepoint

#### Athletics and Recreational

Jazz Dancing
Advanced Square Dancing
Ballroom Dancing
Belly Dancing
Country & Western Dancing
Hunter Safety
Intermediate Sailing
Ladies Self Defense
Sailing
Scientific Fishing
Slimnastics
Square Dancing
Techniques of Horseback Riding
Ladies Firearms

#### Science

Medical Terminology Solar Energy

#### Business

Local Recording Agents
Federal Service Entrance Exam
Fundamentals of Tax Preparation
How to Prepare for ACT, SAT &
College Boards
Securities Investments
Wills, Trusts, and Probate

#### Communications

Conversational German Conversational Spanish I Conversational Spanish II Interpersonal Communications

#### Educational

Driver Education (Adults & Under 18)
Defensive Driving
Dog Obedience Training
Small Engine Repair
Automotive Orientation
Federal Aviation Regulations

#### Homemaking

Microwave Cooking Gourmet Cooking Interior Decoration Intermediate Sewing Sewing I Ouilting

# Central Texas Vocational Skills Training Center

### GENERAL INFORMATION

The Central Texas Vocational Skills Training Center has been developed to serve the citizenry of Central Texas by providing realistic and timely employable skills to out-of-school youths and adults wishing entry or improvement in a career. The need for such useful skills training is paramount as the demand for increased technical services in the state and country expands. Central to the development of the entire Skills Center concept is the training of relevant skills based on the real needs of industry, business, and government. The content of the vocational programs is determined by the specific competencies or skills needed for current employment as validated by Advisory Committees from the Central Texas industrial community. The carefully designed, modularized instruction provide for maximum learner progress and the flexibility to accommodate special student needs. Training programs provide assessment of cognition and performance mastery. Certificates are earned listing actual competencies, evidenced by 80% written and 100% performance. Curriculum is continually developed and updated. Vocational programs are complimented by Life Skills Training, which includes experience in self-motivation, study skills, daily living skills, and world of work skills.

#### Registration and Admission

Registration is open all year round, except on official college district holidays. Admission is not guaranteed to all programs as certain programs must limit enrollment for reasons of limited space or special equipment needs.

To enroll, each applicant must complete the following:

- 1. Application for Admission
- General vocational guidance and aptitude tests. Testing is not mandatory.
  Trainees are advised to complete a battery of tests to identify the level of
  educational development for targeted remediation and long range vocational
  guidance.
- 3. Hands-on career evaluation.

All tuition and fees must be paid at the time of enrollment. The trainee is responsible for the payment of tuition and fees. Prior to enrollment, each applicant for admission receives a copy of the school's bulletin; course outlines; schedule of tuition, fees, and other charges; regulations pertaining to absences; grading policy; and rules of operation and conduct.

During in-processing, a contract is signed indicating the days and hours (instructional block) students will be in attendance. Since class time is made available based on these contracts, the trainee is expected to be in attendance during the contracted hours. Changes of schedule, adding and/or dropping courses must be completed in the Admissions and Records Office.

Full time training for VA students will be a minimum of 22 hours per week (VA Reg. 14270). Persons attending less than full time, for VA certification, are defined as follows:

Full time = 22 clock hours per week

% time = 16-21 clock hours per week

½ time = 15 clock hours per week

#### Attendance

Attendance is taken at the beginning of each instructional block. Students not present (tardy) at the beginning of the instructional time block for which they are registered will be counted absent in hour increments. Absences for emegency reasons, personal illness, or family emergency will be considered only on presentation of documented evidence that an emergency existed.

#### Non-Credit Course Refunds

The refund policy for non-credit courses offered on the Central Texas College Campus is as follows:

All refunds will be processed on the basis of the date the withdrawal form is filed with the records office.

Refunds of 100% of tuition and fees will be processed for students withdrawing prior to the first class meeting.

No refunds will be available after the first class meeting.

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

#### Withdrawal

Any student who desires to, or must, withdraw from a course must file an Application for Withdrawal/Refund at the Records Office. The withdrawal form must be signed by the student. Applications for Withdrawal/Refund will not be accepted after the close of business on the last scheduled class day.

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 Financial Aid Office. Military Tuition Assistance students are referred to the Military Education Center.

Students who are administratively withdrawn from classes without officially withdrawing will receive an "XN" grade and are ineligible for refunds.

#### Previous VA Students

Any student who withdraws from class, stops attendance or alters his schedule in any way that might effect payment of his educational benefits, must report the change in a timely manner to the Veteran Services Office as well as complying with other Skills Center policies relating to student withdrawal.

#### Student Progress

The grade of P must be maintained in each course, within the prescribed clock hours, to maintain satisfactory progress.

The grading system used is as follows:

- P = Satisfactory mastery of the course
- N = Incomplete mastery of course competencies within the clock hours alloted for course completion. Upon receipt of an N the student is given an extension equal to 1/3 the alloted time for the course to complete with a grade of P. If the course is not complete at the end of the 1/3 extension, the student must re-register for the course.
- XN = Administrative Termination (Limited to internal reports, posted to the permanent academic record as the grade of N). To be used in reporting excessive absences to VA and other agencies.
  - W = Official withdrawal from course in which enrolled.

Terms of probation for VA certification purposes are:

- a. A student who receives an N grade in a course is placed on probation.
- b. Only one course may be repeated under VA certification during the entire program of study.
- c. Students who wish to demonstrate their ability to maintain satisfactory progress, and elect to do so from their own resources, may do so with approval of the counseling staff, but may not be certified for VA purposes.

A veteran will be interruped for VA pay purposes when he/she accumulates absences, occurring only when the school is in operation, in excess of the following:

- 5 days (trainee in attendance 5 or more days per week) in a calendar month.
- 4 days (trainee in attendance 4 days per week) in a calendar month.
- 3 days (trainee in attendance 3 days per week) in a calendar month.

School holidays such as summer vacation and Christmas holidays, etc., are not considered as days of absence.

Any student receiving more than one N grade will be interruped. Any student receiving a Wor XN grade will be interrupted.

Students whose attendance is unsatisfactory will be re-admitted to their course of studies after a thirty-day suspension period, at the discretion of Dean of the Skills Center and/or counseling staff.

A certificate of training, listing competency mastery, is furnished to the student upon satisfactorily completion of the program of study.

# Schedule of Tuition and Laboratory Fees

\$10.00

## **TUITION:**

Learning Resource Center Courses 0 to 25 Contact Hours

	Ψ10.00
26 to 48 Contact Hours	20.00
Skills Course	
0 to 25 Contact Hours	\$25.00
26 to 48 Contact Hours	50.00
49 to 96 Contact Hours	60.00
97 or More Contact Hours	75.00
FEES:	
Laboratory Fees (For Those Courses Requiring Laboratory) Auto Body Repair	
Courses less than 75 Contact Hours	\$ 8.00
More than 75 Contact Hours	40.00
Automotive Mechanics	
Course less than 48 Contact Hours	\$ 8.00
Courses 48 to 72 Contact Hours	20.00
Courses more than 72 Contact Hours	40.00
Building Trades (All Courses)	\$30.00
Diesel Mechanics (All Courses)	30.00
Medical Records (All Courses)	8.00
Drafting (All Courses)	20.00
Office Occupations (All Courses)	8.00
Life Skills Training (All Courses)	8.00
Medical Secretary (All Courses)	8.00
Print Shop Trades (All Courses)	20.00
Welding (All Courses)	50.00

## PROGRAMS AVAILABLE AT THE SKILLS CENTER

#### **AUTOMOTIVE MECHANICS**

A 1060 Hour Certificate Program

Provides detailed instructional experiences required for the general service mechanic including fuel systems, exhaust systems, cooling systems, steering and suspension systems, brakes, electrical systems and tune-up procedures.

		Contact Hours
SCAT 0101	Shop Practices and Automotive Basic I	69
SCAT 0102	Automotive Basics II	28
SCAT 0103	Shop Tools and Equipment I	83
SCAT 0104	Shop Tools and Equipment II	67
SCAT 0105	Brake Systems I	105
SCAT 0106	Brake Systems II	106
SCAT 0107	Steering and Suspension I	71
SCAT 0108	Steering and Suspension II	97
SCAT 0109	Electrical Systems I	66
SCAT 0110	Electrical Systems II	100
SCAT 0111	Fuel and Emission Control	71
SCAT 0112	Engine Tune-Up	60
SCAT 0113	Automotive Engines	137
		Total 1060

#### **AUTO BODY REPAIR**

A 1004 Hour Certificate Program

Provides detailed instructional experiences required for general auto body repair including estimation, frame repair and alignment, body finishing, painting, metal repair, and parts replacement.

		<b>Contact Hours</b>
SCAB 0101	Auto Body Basics	48
SCAB 0102	Shop Tools and Equipment I	48
SCAB 0103	Shop Tools and Equipment II	48
SCAB 0104	Basic Auto Body Services	48
SCAB 0105	Flame Cutting Equipment	55
SCAB 0106	Automotive Painting	100
SCAB 0107	Minor Auto Body Repairs I	96
SCAB 0108	Minor Auto Body Repairs II	96
SCAB 0109	Shielded Metal Arc Welding Equipment I	56
SCAB 0110	Shielded Metal Arc Welding Equipment II	96
SCAB 0111	Shielded Metal Arc Welding Equipment III	48
SCAB 0112	Brazing and Heat Shrinking	48
SCAB 0113	Bumper Assemblies	25
SCAB 0114	Major Auto Body Repairs I	96
SCAB 0115	Major Auto Body Repairs II	96
	• •	Total 1004

# **BUILDING MAINTENANCE TRADES**

A 1062 Hour Certificate Program

Provides comprehensive instructional experiences in all aspects of building maintenance and repair to include basic shop skills, carpentry, plumbing, electricity, floors, paint and wall covering, cabinetry, roofing, masonry, mechanical work, custodial techniques, and heating and air-conditioning.

and an -conditioning.		Contact Hours
SCBT 0101	Basic Shop Skills I	42
SCBT 0102	Basic Shop Skills II	53
SCBT 0103	Carpentry I	88
SCBT 0104	Carpentry II	98
SCBT 0105	Roofing	40
SCBT 0106	Floors	50
SCBT 0107	Cabinets	120
SCBT 0108	Paint/Wall Covering	78
SCBT 0109	Electrical	95
SCBT 0110	Air Conditioning/Heating	60
SCBT 0111	Plumbing I	81
SCBT 0112	Plumbing II	68
SCBT 0113	Мазолгу	40
SCBT 0114	Mechanical I	50
SCBT 0115	Mechanical II	60
SCBT 0116	Custodial	39
		Total 1062

#### **DIESEL MECHANICS**

A 949 Hour Certificate Program

Provides detailed instructional experiences required for the general diesel mechanic including comprehensive trouble-shooting and repairing two and four-cycle engines.

J	Ca	ntact Hours
SCDM 0101	Shop Procedures, Tools and Equipment	105
SCDM 0102	Common Diesel Engine Items	33
SCDM 0103	Basic Diesel Engine Operating Principles	63
SCDM 0104	Auxiliary Diesel Systems I	27
SCDM 0105	Auxiliary Diesel Systems II	65
SCDM 0106	Air Inductions Systems	26
SCDM 0107	Basic Electrical Systems	93
SCDM 0108	Fuel Injection Systems I	85
SCDM 0109	Fuel Injection Systems II	100
SCDM 0110	Trouble & Diagnosis	102
SCDM 0111	Disassembly, Inspection, Repair, and	
	Re-Assembly I	65
SCDM 0112	' Disassembly, Inspection, Repair, and	
	Re-Assembly II	77
SCDM 0113	Engine Tune-Up and Dynamometer Testing	60
SCDM 0114	Welding and Cutting	48
		Total 949

#### LIFE SKILLS TRAINING

A 125 Hour Training Program

Provides instructional experiences for development of study skills, job seeking skills, job keeping skills, goal setting and management of personal, financial and community resources.

		Contact Hours
SCGA 0101	Career & Occupational Information I	60
SCGA 0102	Career & Occupational Information II	20
SCGA 0103	Career & Occupational Information III	45
		Total 125

#### MEDICAL RECORDS CLERK

A 1444 Hour Certificate Program

Provides detailed instructional experiences required for the medical librarian or records specialist including classification and storage of patients' records, statistical compilations, admission and discharge procedures, codes, indexes, and files records of diagnoses, diseases, and treatments.

		Contact Hours
SCMR 0101	Medical Orientation/Receptionist Skills	47
SCMR 0102	Communication Skills	50
SCMR 0103	20 WPM & Statistical Typing	80
SCMR 0104	40 WPM	80
SCMR 0105	60 WPM	80
SCMR 0106	80 WPM	120
SCMR 0107	Medical Records Orientation	26
SCMR 0108	Introduction to Medical Terminology	67
SCMR 0109	Medical Terminology 2	40
SCMR 0110	Numbering and Filing	50
SCMR 0111	Content and Format; Indexes and Registers	75
SCMR 0112	Medical Terminology 3	80
SCMR 0113	Medical Terminology 4 & 5	90
SCMR 0114	Medical Terminology 6, Utilization Review	50
SCMR 0115	Medical Terminology 7; Release of Information	40
SCMR 0116	Medical Terminology 8	60
SCMR 0117	Values and Standards; Medical Terminology 9	74
SCMR 0118	Medical Transcription	90
SCMR 0119	Classification System I	96
SCMR 0120	Classification System 2	84
SCMR 0121	Reporting Systems	65
		Total 1444

# MEDICAL SECRETARY COURSES

A 1093 Hour Certificate Program

Provides detailed instructional experiences required for a medical secretary including the preparation of medical charts and reports for doctors or hospitals, basic medical technology, invoicing, scheduling of appointments and basic clerical skills.

		Contact Hours
SCMS 0101	Medical Orientation/Receptionist Skills	48
SCMS 0102	Communications Skills	50
SCMS 0103	20 WPM; Statistical Typing	80
SCMS 0104	40 WPM	80
SCMS 0105	60 WPM	90
SCMS 0106	80 WPM	120
SCMS 0107	Introduction to Medical Terminology	67
SCMS 0108	Medical Terminology 2	40
SCMS 0109	Records Management	50
SCMS 0110	Production Skills; Transcribing	48
SCMS 0111	Medical Terminology 3	80
SCMS 0112	Medical Terminology 4 & 5	90
SCMS 0113	Word Processing	65
SCMS 0114	Medical Terminology 6 & 7	65
SĈMS 0115	Medical Terminology 8	60
SCMS 0116	Medical Terminology 9	60
		Total 1093

#### OFFICE OCCUPATIONS

A 719 Hour Certificate Program

Provides detailed instructional experiences required for a secretary including typing, filing, receptionist duties, shorthand, transcribing procedures, and communication skills.

		Contact Hours
SCOA 0101	Keyboard Mastery I	100
SCOA 0102	Keyboard Mastery II	90
SCOA 0103	Computational Skills	25
SCOA 0104	Receptionist's Skills	20
SCOA 0105	Records Management	60
SCOA 0106	Communication Skills	60
SCOA 0107	Business Communication Typing	5 <i>7</i>
SCOA 0108	Shorthand and Transcription	96
SCOA 0109	Statistical Data	18
SCOA 0110	Word Processing Skills	83
SCOA 0111	Specialized Skills	30
SCOA 0112	Bookkeeping	80
		Total 719

#### PRINT SHOP TRADES

A 531 Hour Certificate Program

Provides detailed instructional experiences required for an offset printer including basic shop skills, stripping and platemaking, offset press operation, bindery operations, layout and design, composition, and camera and darkroom procedures.

		Contact Hours
SCPT 0101	Basic Shop Skills	33
SCPT 0102	Printing Mathematics	24
SCPT 0103	Layout and Design	24
SCPT 0104	Composition	24
SCPT 0105	Camera Operations & Darkroom Procedures	72
SCPT 0106	Stripping and Platemaking	18
SCPT 0107	Offset Press Operations I	76
SCPT 0108	Offset Press Operations II	56
SCPT 0109	Offset Press Operations III	42
SCPT 0110	Offset Press Operations IV	96
SCPT 0111	Offset Press Operations V	30
SCPT 0112	Bindery Operations	36
		Total 531

#### WELDING

### A 591 Hour Certificate Program

Provides detailed instructional experiences required in shielded metal arc welding and pipe welding including basic shop skills, flame cutting, and arc welding in all positions with conventional electrodes.

conventional electrodes.		Contact Hours
SCWL 0101	Basic Shop Information	77
SCWL 0102	The Flame Cutting Equipment	80
SCWL 0103	The Shielded Metal Arc Welding	
	Equipment I	74
SCWL 0104	The Shielded Metal Arc Welding	
	Equipment II	90
SCWL 0105	The Shielded Metal Arc Welding	
	Equipment III	90
SCWL 0106	The Shielded Metal Arc Welding	
	Equipment IV	90
SCWL 0107	The Shielded Metal Arc Welding	
	Equipment V	90
		Total 591

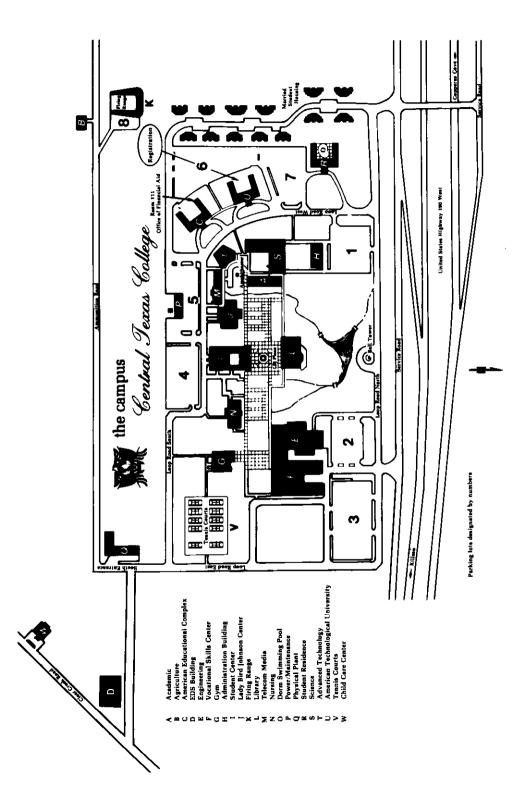
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