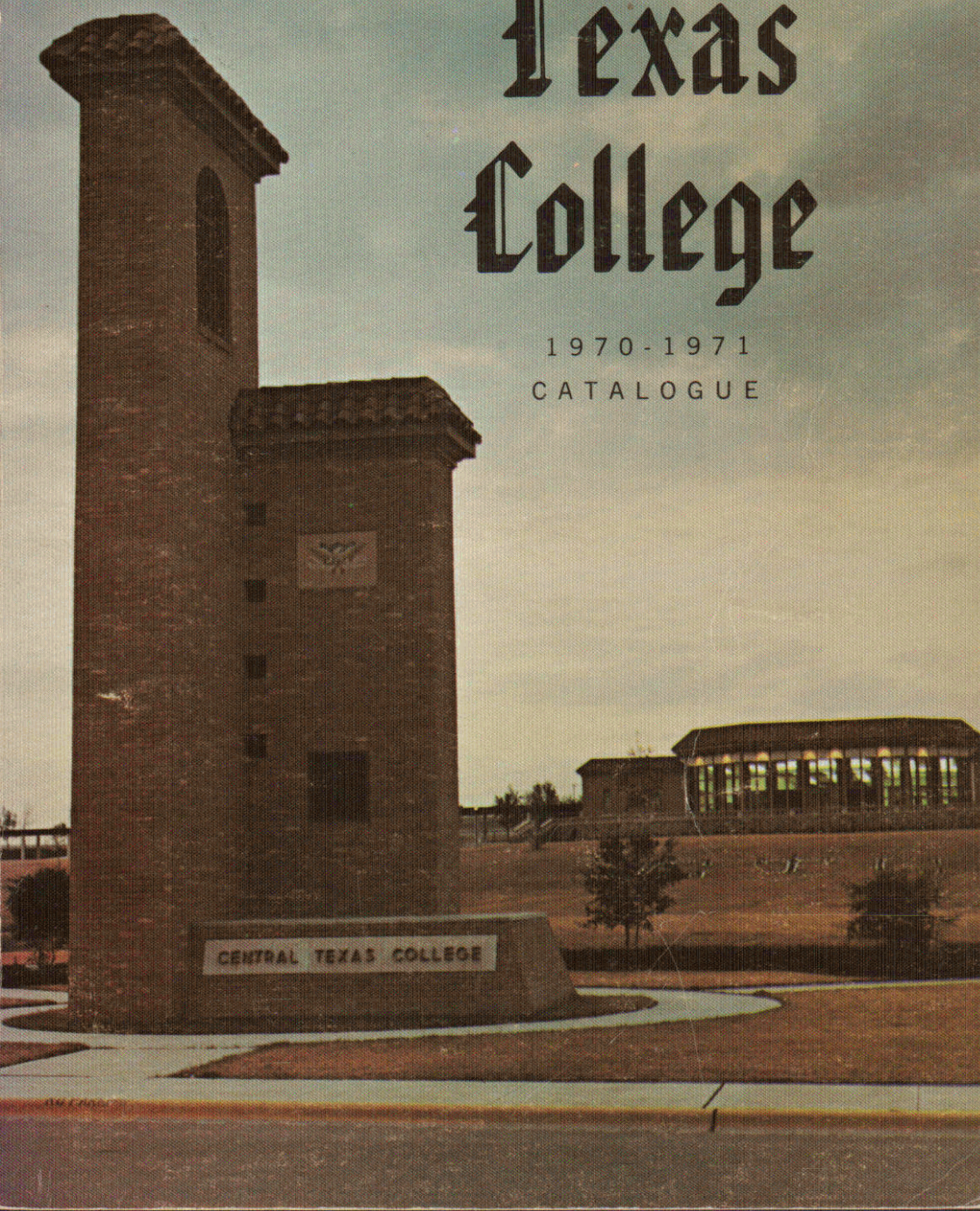


# Central Texas College

1970-1971  
CATALOGUE



# Central Texas College

**"Whoever increases knowledge  
multiplies the uses to which  
he is able to turn the gift  
of his Creator."**

**— John Quincy Adams**





An excerpt from the speech delivered by the President of the United States, Lyndon Baines Johnson, at the dedication of this College:

"... just as our country lived through a great age of exploration in the last century, we have entered in this century another age. It will be remembered — I hope you are remembered with it — as the age of advancement, as the era of education.

"This college is proof of that.

"... we come here today to dedicate this college . . . to dedicate it forever to the service of the people, and to the progress of America."

An excerpt from the speech delivered by the President of Central Texas College, Dr. Luis M. Morton, Jr., introducing the President of the United States, Lyndon Baines Johnson:

"How fitting it is that one so concerned with the cause of education and so dedicated to the welfare of our servicemen should dedicate a college so committed to helping not only our local citizens, but also the men in uniform who come from all parts of this Nation. No greater honor could come to Central Texas College than to have The President of the United States of America dedicate this new and dynamic institution of higher learning. The honor is doubly significant because the man who holds this highest office is a great humanitarian — dedicated to the causes of freedom, peace, and education in our land and throughout the world."



Shown welcoming President Lyndon B. Johnson upon his arrival for the dedication of Central Texas College is Dr. L.M. Morton, Jr., left and William S. Bigham, President of the College Board of Trustees.

# Central Texas College

A Public Co-Educational Institution  
Third General Catalogue  
1970-1971

## ACCREDITED BY

SOUTHERN ASSOCIATION OF COLLEGE AND SCHOOLS

## APPROVED BY

COORDINATING BOARD,  
TEXAS COLLEGE AND UNIVERSITY SYSTEM  
TEXAS EDUCATION AGENCY

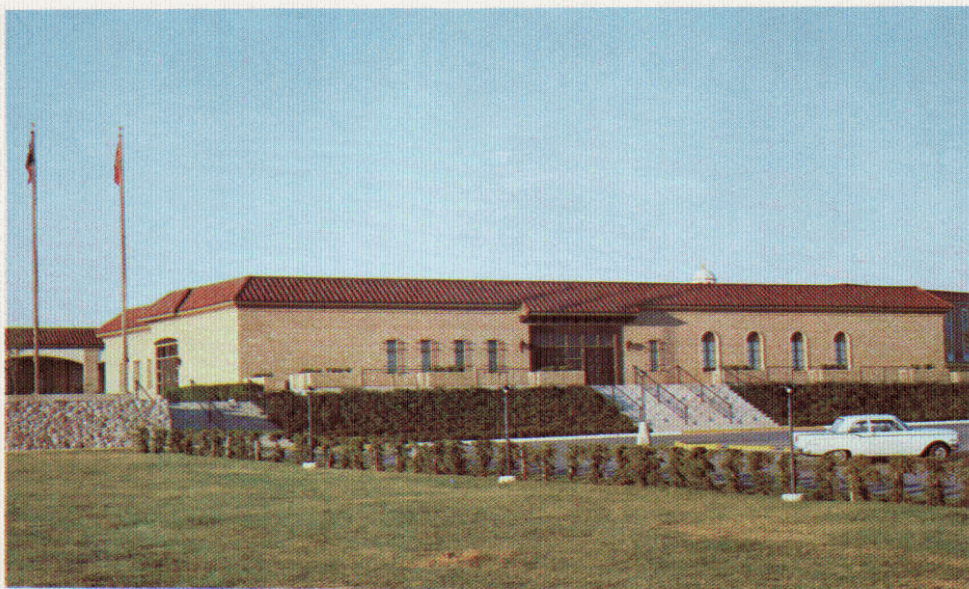
## Listed in REPORT OF CREDIT GIVEN

by  
AMERICAN ASSOCIATION OF COLLEGIATE  
REGISTRARS AND ADMISSIONS OFFICERS

## MEMBER OF

ASSOCIATION OF TEXAS COLLEGES AND UNIVERSITIES  
AMERICAN ASSOCIATION OF JUNIOR COLLEGES  
TEXAS ASSOCIATION OF JUNIOR COLLEGES  
TEXAS ASSOCIATION OF PUBLIC JUNIOR COLLEGES  
TEXAS ASSOCIATION OF COLLEGIATE REGISTRARS  
AND ADMISSIONS OFFICERS



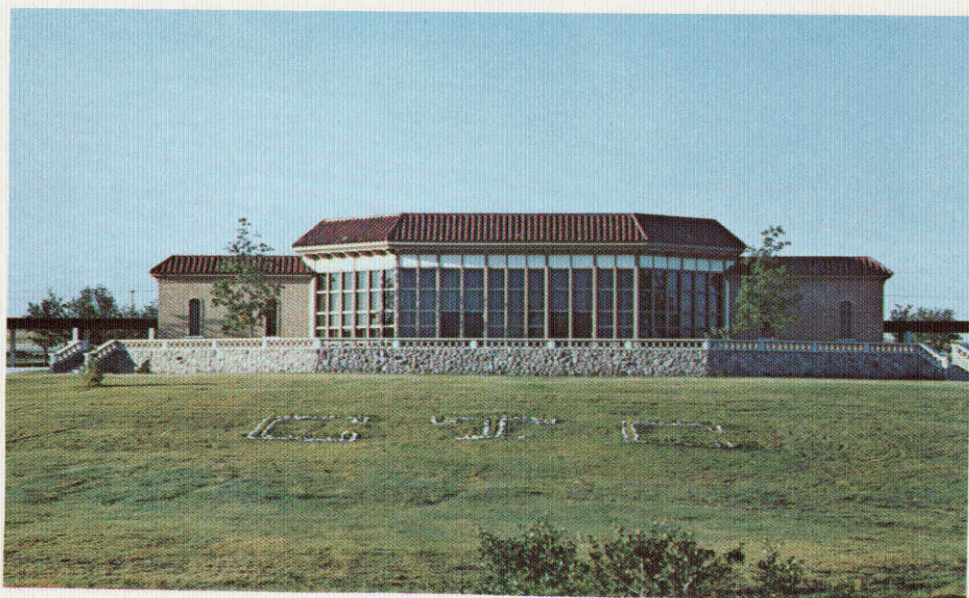


Administration Building



Campus During the Evening Hours





The Oveta Culp Hobby Memorial Library



Interior View  
of the  
Oveta Culp Hobby Memorial Library





Inner Landscaped Courtyard  
in the  
Student Service Occupations Center



Dining Area  
in the  
Student Service Occupations Center





Lobby of the  
Student Service Occupations Center



A Resident Hall Bedroom



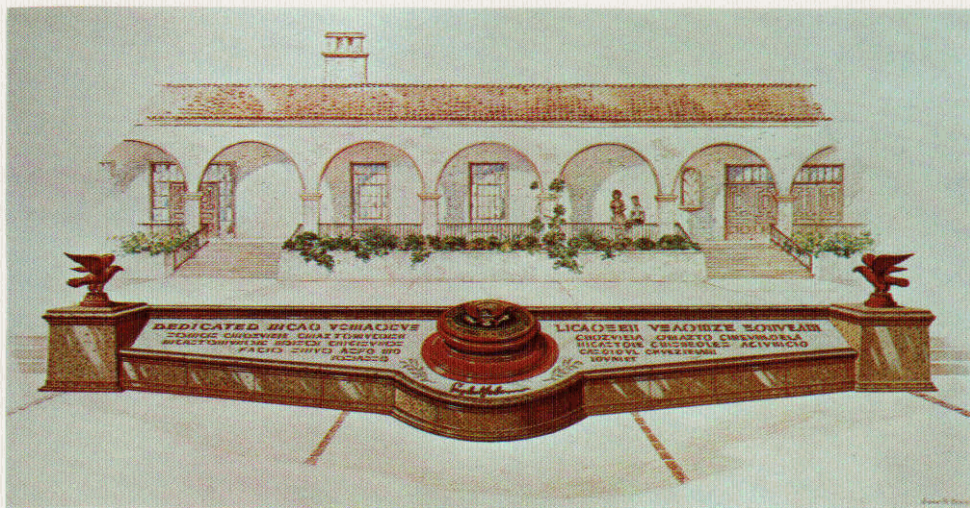


College Observatory

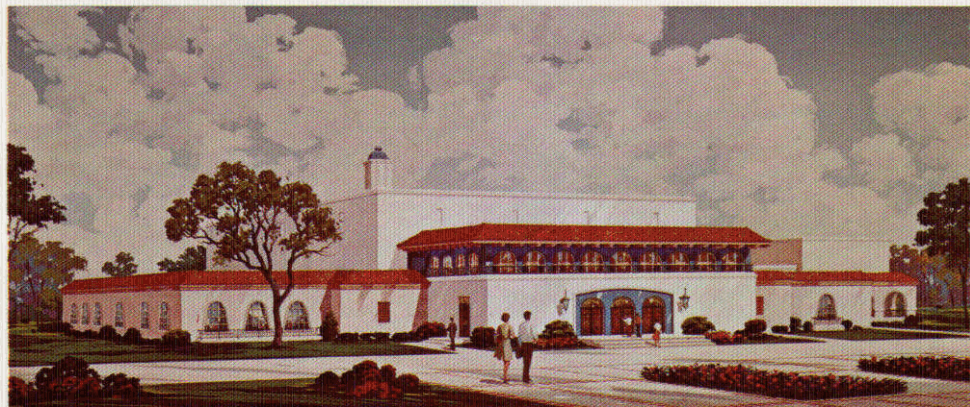


Nursing Building





Area citizens plan a Memorial in honor of the 36th President of the United States, Lyndon Baines Johnson, to be erected in the center of the College campus. Central Texas College was dedicated, in 1967, ". . . to the service of the people. ." by President Johnson.



The new Lady Bird Johnson Center for the Performing Arts at Central Texas College is dedicated to Mrs. Johnson. The Center will be just a few feet away from the Lyndon Baines Johnson Memorial.



# A Message from the President



It is with great enthusiasm and sincere emotion that I welcome each of you to Central Texas College. The founding students contributed so much to this fresh and dynamic institution of higher learning. They began new traditions and showed their love and devotion for Central Texas College. This can be seen clearly by the many landmarks of beauty which they have left for you. Yet, those of you who come for the first time will find the work of building and molding this institution has truly just begun. Yours will be the task of laying not only the cornerstones to new buildings, but of erecting enduring values which will benefit humanity.

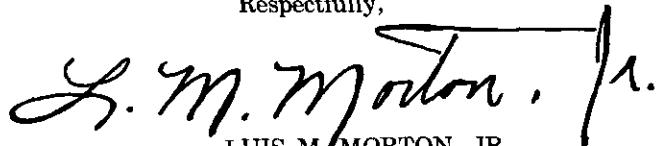
When the 36th President of the United States, Lyndon Baines Johnson, honored us by dedicating Central Texas College, he did so to the service "of all the people". By this he meant that it was the sacred duty of everyone associated with this institution to do everything in their power to help as many people as would be humanly possible, to the end that they too become productive citizens of this great society and share in the happiness which comes with achievement and success.

You will be called upon on more than one occasion to show your worth by the master of your academic tasks, by your respect for the rights of all, and by abiding by the laws which regulate this nation, this state, and this college. The words, "Discipline and Dedication" as they are found on the Seal of Central Texas College have deep significance in the philosophy and history of the United States. To many of the people who helped establish this college, they mean simply that each of us does the best that he can to serve each other within the limits of the talents God has given us.

To my generation, which has already received so many, many benefits from this land, we say to those who preceded us: "Thank you for your heritage." To the younger generation whom we strive to serve, we say: "Help us to continue the task of education and leadership passed on to us." As you pass the tower at the front of the College, stop for a moment and read the plaque on which you will find these words inscribed: "Every generation sacrifices for the next." I feel sure it was intended to remind both young and old that each has a strong obligation to serve humanity.

Thank you.

Respectfully,



LUIS M. MORTON, JR.  
President



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M.L., The University of Houston  
Ph.D., The University of Texas  
J.D., St. Mary's University  
Post Doctoral Studies: Michigan State University,  
University of Colorado

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B.A., The University of Texas  
M.A., East Texas State College  
Doctoral Study: The University of Texas

PHILLIP R. SWARTZ . . . . . Director of Fiscal Affairs  
B.B.A., West Texas State University  
M.B.A., West Texas State University  
Post Graduate Studies, The University of Kentucky

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**JOHN W. MOFFITT**  
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Director of Evening College

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Bursar

**SHERIDAN D. CAVITT, JR.**  
Supervisor of Admissions and Counseling

**RONALD C. BAUGH**  
Director of Student Financial Aid

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Assistant to the President

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Director of Development

**MISS MARJORY I. CRANE**  
Assistant to the Director of Fiscal Affairs

**MRS. RUTH H. REYNOLDS**  
Director of Library Services

**NOEL H. SCHNITZ**  
Assistant Director of Library Services





## CENTRAL TEXAS COLLEGE

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	25	26	27	28	29	30			24	25	26	27	28	29	30	
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## CALENDAR OF EVENTS 1970-1971

### FALL SEMESTER 1970

July 13 to August 25 .....	Pre-registration
August 24-26 .....	Faculty Meetings
August 26 .....	Dormitory Students Report
August 27 .....	Student Orientation for all New Day College Students
August 28 .....	Registration
August 31 .....	Instruction Begins
November 11 .....	Veterans Day Holiday
November 26-29 .....	Thanksgiving Holidays
November 30 .....	Instruction Resumes
December 15 .....	Instruction Ends
December 16-22 .....	Final Examinations
December 22 .....	Fall Semester Ends

### SPRING SEMESTER 1971

January 13-14 .....	Faculty Meetings
January 15 .....	Registration
January 18 .....	Instruction Begins
April 12-16 .....	Spring Vacation
April 19 .....	Instruction Resumes
May 7 .....	Instruction Ends
May 10-14 .....	Final Examinations
May 15 .....	Graduation Exercises

### SUMMER SESSIONS 1971

#### First Six-Weeks and Twelve-Weeks Terms

May 31 .....	Registration
June 1 .....	Instruction Begins
July 8 .....	Final Examinations for First Six-Weeks Term
July 8 .....	First Six-Weeks Term Ends
August 18-19 .....	Final Examinations for Twelve-Weeks Term
August 19 .....	Twelve-Weeks Term Ends

#### Second Six-Weeks Term

July 12 .....	Registration
July 13 .....	Instruction Begins
August 19 .....	Final Examinations for Second Six-Weeks Term
August 19 .....	Second Six-Weeks Term Ends



## TENTATIVE CALENDAR 1971-1972

### FALL SEMESTER 1971

July 5 to August 23 .....	Pre-registration
August 23-24 .....	Faculty Meetings
August 25 .....	Dormitory Students Report
August 26 .....	Student Orientation for all New Day College Students
August 27 .....	Registration
August 30 .....	Instruction Begins
November 11 .....	Veterans Day Holiday
November 25-28 .....	Thanksgiving Holidays
November 29 .....	Instruction Resumes
December 15 .....	Instruction Ends
December 16-22 .....	Final Examinations
December 22 .....	Fall Semester Ends

### SPRING SEMESTER 1972

January 12-13 .....	Faculty Meetings
January 14 .....	Registration
January 17 .....	Instruction Begins
April 3-7 .....	Spring Vacation
April 10 .....	Instruction Resumes
May 8-12 .....	Final Examinations
May 13 .....	Graduation Exercises

### SUMMER SESSIONS 1972

#### First Six-Weeks and Twelve-Weeks Terms

June 5 .....	Registration
June 6 .....	Instruction Begins
July 4 .....	Legal Holiday
July 13 .....	Final Examinations for First Six-Weeks Term
July 13 .....	First Six-Weeks Term Ends
August 23-24 .....	Final Examinations for Twelve-Weeks Term
August 24 .....	Twelve-Weeks Term Ends

#### Second Six Weeks Term

July 14 .....	Registration
July 17 .....	Instruction Begins
August 24 .....	Final Examinations for Second Six-Weeks Term
August 24 .....	Second Six-Weeks Term Ends

## GENERAL INFORMATION

### LOCATION OF CAMPUS

Central Texas College is a public two-year institution. It is located on U.S. Highway 190 between Killeen, Texas, and Copperas Cove, Texas. The population in a ten-mile radius of Killeen is estimated to be 125,000. The 100-acre campus is within minutes of streams and lakes in what is considered to be an outstanding recreational area.

### HISTORICAL BACKGROUND

The Central Texas College district was created in July 1965 and is composed of the Killeen Independent School District, the Copperas Cove Independent School District, and the Nolanville Common School District. The bond issue to construct and equip the plant followed in October 1965. In January 1966, the Board of Trustees employed the President of the College, and offices were opened in Killeen. The first several months were spent establishing the legal, financial, and academic framework for the College. Final plans and specifications for some of the buildings were completed in June and July of 1966; and the architect was given instructions to begin construction of a Library Building, a Science Building, an Academic Classroom Building, a Technology Building, a Physical Education Building, an Administration Building, a Student Center and a Maintenance Technology Building. A Telecommunications Building was added in 1967, and two Dormitories were added in 1968. All plant facilities are air-conditioned.

Central Texas College opened its doors for the first time in September 1967, and over 2000 students enrolled to become the historic first student body. The College was tabbed by national news media as the "Cinderella Story".

On December 12, 1967, the College received its greatest honor when the 36th President of the United States, Lyndon Baines Johnson, came and dedicated the College "...to the service of all the people..." On this same date the College was honored by the presence of Mrs. Oveta Culp Hobby, for whom the College Board of Trustees dedicated the college library. President Johnson joined in the dedication and ribbon cutting ceremony for the Oveta Culp Hobby Memorial Library.

Throughout the remainder of this first academic year, Central Texas College was honored by visits from many other dignitaries, including high-ranking public officials and military officers.



## 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 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 will necessarily be both flexible and extensive.

Seriousness of purpose, dedication to discipline, and the desire to learn enduring values will all be recognized as outstanding assets and earn the student the right to be helped. This is the desire and privilege of every employee of Central Texas College and helps insure the pursuit of high standards of achievement for student and faculty alike.

In order to insure the fullest service possible to the civilians of the surrounding area and to the personnel of the large military installations adjacent to the campus, Central Texas College will offer extensive and flexible curricula in the academic, technological, vocational, and adult education fields. The educational program will be geared to meet the needs of full-time as well as part-time civilian and military students. The College doors will remain open from early morning until late at night.

Central Texas College complies with Title VI of the Civil Rights Act of 1964. With respect to the admission and education of students, with respect to the employment and promotion of teaching and non-teaching personnel, with respect to student and faculty activities conducted on premises owned or occupied by the College, and with respect to student housing situated on premises owned or occupied by the College, Central Texas College shall not discriminate either in favor of or against any person on account of his or her race, creed, or color.

## EDUCATIONAL OBJECTIVES

**1. University Transfer Education**—The College provides the first two years of college work for those students planning to achieve a Baccalaureate or higher degree.

**2. General Education**—The College provides general education courses which will 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 Arts**—The College provides courses which qualify students in vocational and/or technical fields, and equips them for occupational competency.

**4. Area Service**—The College provides life-long education for adults, opportunities for cultural enhancement, special interest courses, lectures, and meetings designed to satisfy the special needs of business, of the military, and of area groups.

**5. Personal Guidance**—The College provides guidance services which will enable the student to select with proper perspective the educational program that is compatible with his abilities, aptitudes, and ambitions.

## TRANSFER OF CREDITS

Central Texas College is accredited by the Southern Association of Colleges and Schools. Credits will transfer in accordance with standard practices and degree requirements of other institutions.

Precautions will be taken to see that each student is enrolled for the proper courses. Although the ultimate responsibility rests with each student to decide upon the institution to which he wishes to transfer and to see that he takes the proper course(s), Central Texas College considers it also has an obligation to assist each student in the area of academic guidance.

## EXTENSION COURSES

Those persons needing junior, senior, or graduate courses for teacher certification, as well as other purposes, may find these opportunities available at Central Texas College if there is sufficient student need. In collaboration with the University of Texas Extension Teaching and Field Service Bureau and other educational institutions, Central Texas College will arrange for the offering of classes on its campus in order to serve the educational needs of the students in this area.

## ADMISSION REQUIREMENTS

Students who hold diplomas from accredited secondary schools may enter Central Texas College upon the presentation of *certified credentials*. Students transferring from another college will be accepted if they are eligible to return to the transferring institution. Veterans and military personnel, as well as students of mature years who have not had the opportunity to complete a high school course, but who, by reason of special attainments, are prepared to undertake post high school work, may be admitted to certain areas of study if, in the judgment of College officials, such training will be of value to the student.



## **G.E.D. TEST**

The General Educational Development Test will be administered in the Office of Student Affairs for persons over 19 years of age who are not high school graduates and who desire this certificate as an equivalent to the high school diploma.

### **WHAT TO DO BEFORE REGISTRATION**

To insure that all requirements have been met for admission and permission to register you should:

1. Ask the Registrar of the last school you attended to send a transcript of your school record to the Supervisor of Records at Central Texas College. Do this at least two weeks before you come to register.
2. Arrange to take either the ACT or the SAT (CEEB) college guidance examination and request that your scores be mailed to Central Texas College. Either the ACT or the SAT examination will be accepted, but the ACT is preferred. Students should take the examination as early as possible so that scores may be used for guidance at registration.
3. Obtain an application for admission, complete it, and return it to the Supervisor of Records.
4. Make an appointment with the Office of Student Affairs for an interview to obtain a copy of registration materials and secure assistance in planning your course program.
5. Pre-register at the College on the days established in the schedule bulletins.

Completion of the above items will facilitate your enrollment on registration day. Students who fail to complete the above in advance may be given permission to register by the Supervisor of Admission and will be on probationary status until all requirements have been met.

### **ADVANCED STANDING CREDITS**

Students who believe they are eligible for advanced placement or advanced standing may take advanced standing examinations at the College testing center in the Office of the Supervisor of Admissions and Counseling.

To obtain credit by an examination, the student must pass the examination with a grade of either "A" or "B." He will then receive semester-hour credit for the appropriate course(s), and his examination grade will become his course grade. These credits and grades will count toward fulfillment of Central Texas College degree requirements. Students may contact the counselor to obtain information about which courses may be taken by advanced standing examinations.

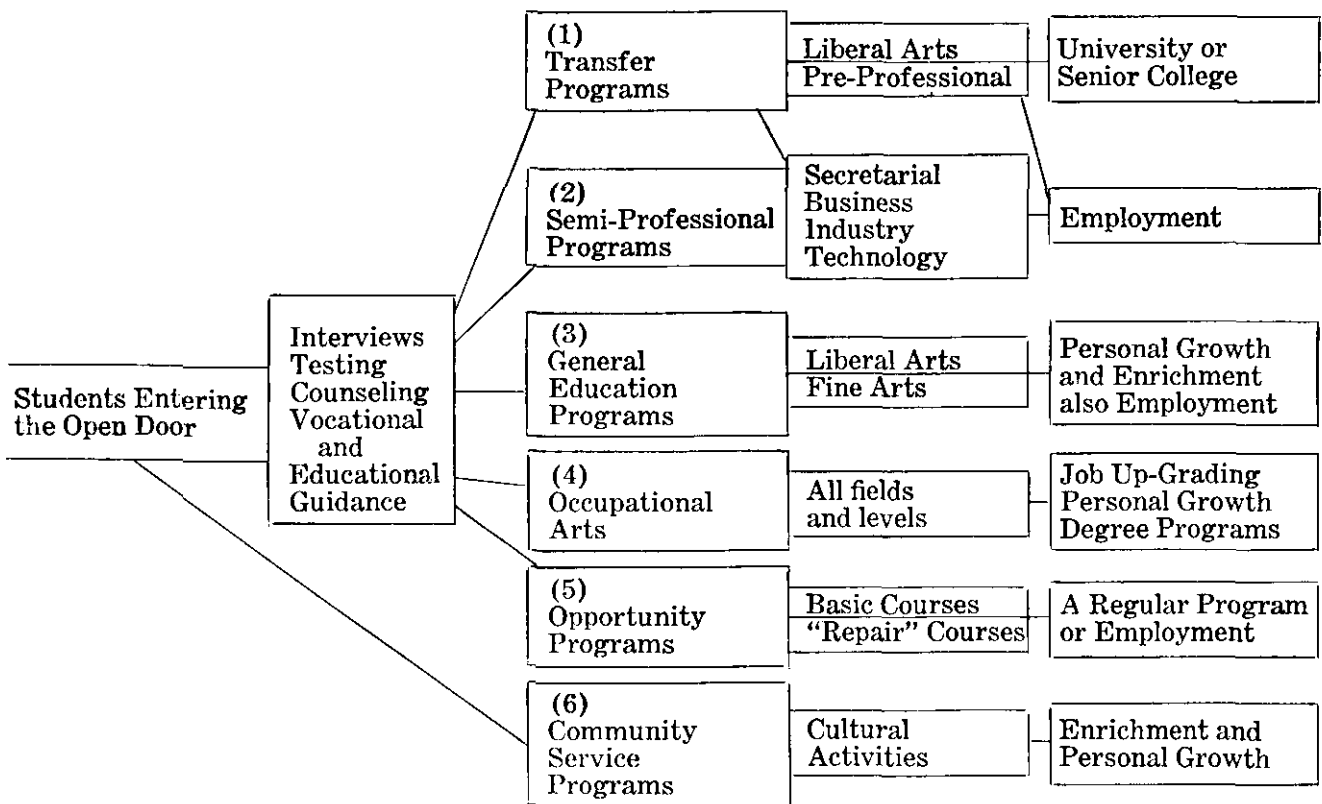
### **WHY YOU SHOULD ATTEND CENTRAL TEXAS COLLEGE**

1. Central Texas College makes possible a less abrupt and less difficult transition from high school to university. With direct personal contact between teacher and student, the adjustment to college life and study is made easier and more pleasant.
2. Because most students may live at home and travel only a few miles to college, the cost of attending Central Texas College is much less than the cost would be for living away from home while attending college, even if a student should receive a \$1,000.00 scholarship from a larger college.
3. Dedicated teachers and counselors will give students maximum individual attention. Thus, the teacher may detect and help the student correct difficulties that might lead to failure and withdrawal from college.
4. Students who have subject or grade deficiencies for transfer to senior institutions are given an opportunity to correct such deficiencies, thus enabling them to go on to the completion of a university education which would otherwise be denied.
5. Adults who have not graduated from high school may be admitted on individual approval in order to gain enrichment from college study.
6. A major advantage at Central Texas College is that students will gain valuable experience through participation in student activities which will give them self-reliance, leadership abilities, and ability to get along well with others. These qualities are most important for good citizenship and a successful life after completing college.
7. Regardless of ultimate goals, students at Central Texas College should be better persons for having mingled in classes and social activities with people who have lived and traveled internationally.
8. The students, faculty, and administration of Central Texas College are dedicated to quality education, sound aspirations, proper social development, and the general betterment of individuals and the world in which we live.

9. Central Texas College is a completely new and modern college with a distinctive character and personality. The campus is designed for maximum function and beauty. Students will find the scenery to be relaxing, as well as highly conducive to study and learning.



**FLOW CHART SHOWING GOALS WHICH MAY BE  
CHOSEN BY STUDENTS AT CENTRAL TEXAS COLLEGE**



## RECOMMENDED HIGH SCHOOL PROGRAM\*

<b>Subjects</b>	<b>Freshman</b>	<b>Soph.</b>	<b>Junior</b>	<b>Senior</b>
<b>ENGLISH</b>	English	English	English	English
<b>SOCIAL STUDIES</b>		Elective	U.S. History	
<b>MATHEMATICS</b>	Algebra	Geometry	Advanced Algebra for science majors; recommended for others	Advanced Mathematics for science majors
<b>FOREIGN LANGUAGE</b>	Foreign Language	Continue the same language	(a) Continue the same language or (b) Begin another language	(a) Recommend cont. same language or (b) Continue the second language
<b>PHYSICAL EDUCATION</b>	P.E.	P.E.	P.E.	P.E.
<b>ELECTIVES</b>	Recommended for all precollege students: typing, art, music, and additional courses in science and social science.			

\*This is a recommended program (not specifically required) as variations will exist in the requirements for graduation from different high schools.

Students expecting to specialize in foreign language, music, drama, or science in college should begin those subjects in high school. Students looking forward to a college major in the sciences, mathematics, medicine, business administration, law, music, or pharmacy should include in their high school curriculum at least two years of algebra, one year of plane geometry and in most cases, one or more years of biology, chemistry and physics. Students who plan to major in engineering should take solid geometry or trigonometry and analytical geometry in addition to the above listed math courses.

## DEGREES CONFERRED

Central Texas College will confer the degrees of Associate in Arts, Associate in Science, Associate in Applied Science\*, and Associate in General Education.

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\*B.B.A. majors may substitute one year of accounting for the one year of science or language to meet associate degree requirements. Senior college degree requirements vary considerably. Students should check the specific catalogue for exact requirements.

## DEGREE REQUIREMENTS

### Associate in Arts

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

1. Twelve semester hours of English
2. Six semester hours of American History.
3. Six semester hours of American Government.
4. Two years of foreign language or one year of foreign language and one year of science.
5. Four semesters of Physical Education.
6. Psychology 111.
7. A minimum of eighteen semester hours of sophomore courses, twelve semester hours of which must be completed at Central Texas College.
8. Have a minimum overall grade-point average of 2.0 ("C" average).
9. Meet all other college requirements.

### Associate in Science

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

1. Twelve semester hours of English.
2. Six semester hours of American History.
3. Six semester hours of American Government.
4. Four courses of science.
5. Six semester hours of math.
6. Four semesters of Physical Education.
7. Psychology 111.
8. A minimum of fifteen semester hours of sophomore courses, twelve semester hours of which must be completed at Central Texas College.
9. Have a minimum overall grade-point average of 2.0 ("C" average).
10. Meet all other college requirements.

### Associate in General Education

Complete a minimum of sixty-one semester hours in courses chosen from the total curricular offerings of the College. Selections should include courses from the social sciences, humanities, communications, and sciences and may include courses from the vocational and technical curricula. A minimum overall grade-point average of 2.0 ("C") is required.



**Associate in Applied Science**

The Associate in Applied Science Degree will be awarded to students who meet curricular requirements for two-year technology programs. A minimum overall grade-point average of 2.0 ("C") is required.

**Certificate of Completion**

A Certificate of Completion will be awarded to students who fulfill the curricular requirements of special courses and programs.

**LIBRARY**

The Oveta Culp Hobby Memorial Library is one of the outstanding junior college libraries in the nation. Over 23,000 volumes are housed in this beautifully decorated and furnished building which was dedicated to a native of Killeen and the first Secretary of the Department of Health, Education and Welfare. President Lyndon B. Johnson joined the College Board President, William S. Bigham, in the dedication to Mrs. Oveta Culp Hobby. The building has been scientifically planned and the volumes carefully selected to compliment the instructional program of the College. Audio-visual resources and other advanced facilities to assist the student in reading and research are located in the library. The central location of the library and the great emphasis upon its contents clearly establish the strong desire of Central Texas College to have a superior academic program.

**HEALTH CERTIFICATE**

Recognizing the fact that good health and health practices contribute greatly to academic success, every student entering Central Texas College must provide a statement of his or her health status on a form supplied by the College. Personal hygiene requirements include proper grooming and the wearing of clean clothes and shoes.

**COUNSELING (Career Guidance)**

Many students find it useful to discuss academic, vocational, and personal problems with a College counselor. Exploration of aptitudes and interests are encouraged as a means to intelligent planning for a future career. College personnel are interested in the well-being of each student and always stand ready to assist with problems when possible.

## ENTRANCE EXAMINATIONS

Central Texas College will accept either the American College Testing Program (ACT) or College Entrance Exam Board (SAT). There is not a minimum score required for admission. Scores are used for guidance purposes by the College counselors and advisors.

## TUITION AND FEE SCHEDULE

### TUITION

Semester Credit Hours	Resident of the District	Non- Resident of the District	Non- Resident of Texas
1	\$20.00	\$24.00	\$ 75.00
2	21.00	26.00	90.00
3	24.00	34.00	100.00
4	30.00	40.00	115.00
5	36.00	46.00	140.00
6	44.00	54.00	150.00
7	52.00	62.00	175.00
8	60.00	70.00	200.00
9	66.00	76.00	225.00
10	72.00	82.00	235.00
11	74.00	84.00	245.00
12	75.00	85.00	250.00

### INDIVIDUAL INSTRUCTION

#### Music

1 Semester Credit Hour	\$25.00
2 Semester Credit Hours	45.00
3 Semester Credit Hours	60.00

#### Career Pilot (as required by curriculum)

Welding	25.00
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### LABORATORY FEE (in all courses requiring use of laboratory)

5.00

#### Exceptions:

Photography	8.00
Microbiology	8.00

## STUDENT SERVICES FEE

Students taking 9 hours or more	5.00
Students taking less than 9 hours	1.00
Annual – Day College students taking 9 hours or more	6.00
Graduation Fee	10.00

## OTHER FEES

Property Deposit (refundable when student withdraws from Central Texas College. This deposit is required of every student enrolled for more than nine semester hours.)	10.00
Dormitory Property Deposit (those students living in dormitories)	25.00

## REFUND OF TUITION

Refunds of tuition and fees are made subject to the following regulations. All persons who enroll are expected to be aware of these regulations.

1. A refund of 50% will be made until the end of the first week of classes, i.e., until the College offices close on the fifth class day.
2. A refund of 20% during the second week of classes.
3. No refund will be made after the end of the tenth class day.
4. A request for refund must be completed in the Office of the Director of Student Affairs. A check for the authorized amount will be mailed to the address shown on the request form.
5. Refunds for summer sessions and special courses will be calculated on an apportioned basis equivalent to the first two weeks of classes as stated above.

## FINANCIAL AID PROGRAMS

Central Texas College participates in numerous financial aid programs designed to assist students who show serious interest in their education. We believe that an effective program for student aid must be administered in such a way as to be consonant with the aims and purposes of the college, must advance institutional goals, and must be in harmony with institutional values. Students who participate in the various programs for financial aid



must comply with the rules and regulations of the College to retain eligibility for the programs.

Central Texas College participates in the following financial assistance programs:

National Defense Student Loan	Educational Opportunity Grant
Texas Opportunity Plan Loan	Nursing Student Scholarship
Federal Guaranteed Loans	Law Enforcement Grant
Nursing Student Loan	Federal Work-Study Program
Law Enforcement Loan	The Connally-Carrillo Act
Institutional Scholarships	

*Inquiries concerning student financial aid should be sent to:*

Director of Student Financial Aid  
Central Texas College  
Highway 190 West  
Killeen, Texas 76541

### **G. I. BILL**

Central Texas College is an approved college for those who wish to attend and receive benefits under the Veterans Readjustment Benefits Act of 1966.

### **MILITARY EDUCATION BENEFITS**

Many military personnel not eligible to participate under the Veterans Readjustment Benefits Acts of 1966 may wish to attend Central Texas College under the Tuition Assistance Program which pays for 75% of tuition. (Department of Defense Appropriations Act of 1966, P. L. 89-213.)

### **WAR ORPHANS AND KOREAN VETERANS**

Central Texas College is an approved college for those who qualify under these classifications.

### **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 Rehabilitation Office.

## **EVENING COLLEGE**

Regular academic, as well as technical, vocational, and adult education courses, will be offered Monday through Thursday evenings from 6:00 PM to 10:30 PM.

## **SUMMER SESSION**

One twelve-weeks term will be offered during the summer. Maximum student load for this term is fourteen semester hours.

Two six-weeks terms are also offered during the summer. Classes meet daily, Monday through Thursday. The maximum student load is seven semester hours for each six-weeks term.

## **MILITARY CREDIT**

Central Texas College will recognize and grant credit to military personnel for educational training completed in the Armed Forces. Credit is granted in accordance with the recommendations of the American Council on Education. Work completed through the United States Armed Forces Institute is also accepted. Requests for military service credit will be evaluated after a student has completed twelve semester hours of successful work at Central Texas College. However, not more than fifteen semester hours total credit will be allowed for any combination of credits from the educational experiences listed above.

## **VISITORS IN A CLASS**

Permission to visit a class may be granted by the Dean of the College or the Director of the Evening College. Such permission carries with it permission to listen and observe, but not to enter into class discussions or laboratory work.

## **RESIDENCE STATUS**

It is the duty of each student to register under the proper residence and pay the correct tuition. The explanation below of what constitutes a non-resident and a resident is intended to assist the student in properly determining whether or not he qualifies as a resident of the State for tuition purposes. If there is any possible question as to whether he qualifies as a resident of Texas, the student should confer with the Director of Student Affairs.

The term "residence" as used in State Law means "domicile"; the term "resided in" means "domiciled in"; provided the Governing Board of each institution required under this law to charge a non-

resident registration fee is hereby authorized and directed to follow such rules, regulations, and interpretations as are issued by the Coordinating Board for the effective and uniform administration of the non-resident tuition provisions of this law. For the purposes of this law, the status of a student as a "resident" or "non-resident" student is to be determined as follows:

1. a. An individual under twenty-one (21) years of age, living away from his family, and whose family resides in another state or has not resided in Texas for the 12-month period immediately preceding the date of registration shall be classified as a non-resident student.
- b. An individual twenty-one (21) years of age or under whose family has not resided in Texas for the 12-month period immediately preceding the date of registration shall be classified as a non-resident student regardless of whether he has become the legal ward of residents of Texas or has been adopted by residents of Texas while he is attending an educational institution in Texas, or within a 12-month period before his attendance, or under circumstances indicating that the guardianship or adoption was for the purpose of obtaining status as a resident student.
- c. An individual twenty-one (21) years of age or under whose parents were formerly residents of Texas is entitled to pay the resident tuition fee for the 12-month period immediately following the parent's change of legal residence to another state.
2. a. An individual twenty-one (21) years of age or over who has come from outside Texas and who is gainfully employed in Texas for a 12-month period immediately preceding registration in an educational institution shall be classified as a resident student as long as he continues to maintain a legal residence in Texas.
- b. An individual twenty-one (21) years of age or over who resides out of the state or who has come from outside Texas and who registers in an educational institution before having resided in Texas for a 12-month period shall be classified as a non-resident student.
- c. A non-resident student classification is presumed to be correct as long as the residence of the individual in the state is primarily for the purpose of attending an educational institution. After residing in Texas for at least twelve (12) months, a non-resident student may be reclassified as a resident student as provided in the rules and regulations adopted by the Coordinating Board, Texas College and University System. Any individual reclassified as a resident



student is entitled to pay the tuition fee for a resident of Texas at any subsequent registration as long as he continues to maintain his legal residence in Texas.

3. A non-resident who marries and remains married to a resident of Texas, classified as such under this Act at the time of the marriage and at the time the non-resident registers, is entitled to pay the resident tuition fee regardless of the length of time he has lived in Texas, and any student who is a resident of Texas who marries a non-resident is entitled to pay the resident tuition fee as long as he does not adopt the legal residence of the spouse in another state.
4. a. An officer, enlisted man or woman, selectee or draftee of the Army, Army Reserve, Army National Guard, Air National Guard, Texas State Guard, Air Force, Air Force Reserve, Navy, Navy Reserve, Marine Corps, Marine Corps Reserve, Coast Guard, Coast Guard Reserve of the United States, who is assigned to duty in Texas is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required of Texas residents, without regard to the length of time he has been assigned to duty or resided within the state.
- b. As long as they reside continuously in Texas, the spouse and children of a member of the Armed Forces of the United States who has been assigned to duty elsewhere immediately following assignment to duty in Texas are entitled to pay the tuition fees and other fees or charges provided for Texas residents.
- c. The spouse and children of a member of the Armed Forces of the United States who dies or is killed are entitled to pay the resident tuition fee, if the wife and children become residents of Texas within sixty (60) days of the date of death.
- d. If a member of the Armed Forces of the United States is stationed outside Texas and his spouse and children establish residence in Texas by residing in Texas and by filing with the Texas institution of higher education at which they plan to register a letter of intent to establish residence in Texas, the institution of higher education shall permit the spouse and children to pay the tuition, fees, and other charges provided for Texas residents without regard to length of time that they have resided within the State.
5. A teacher, professor, or other employee of a Texas institution of higher education is entitled to register himself, his spouse, and their children in a state institution of higher education by paying the tuition fee and other fees or charges required for

Texas residents, without regard to the length of time he has resided in Texas. A teacher, professor, or other employee of a Texas institution of higher education is any person employed at least one-half time on a regular monthly salary basis by a state institution of higher education.

6. An alien student is classified as a non-resident student; however, an alien who is living in this country under a visa permitting permanent residence or who has filed with the proper Federal immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for resident status for fee purposes under this Act as has a citizen of the United States.
7. The Governing Boards of state-supported institutions of higher education are authorized to assess and collect from each non-resident student failing to comply with the rules and regulations of the Governing Boards concerning non-resident fees a penalty not to exceed Ten Dollars (\$10) a semester.

### **CLASS MEMBERSHIP**

The only way to become an official member of a class at Central Texas College is by following the established procedure for registering and paying of tuition and fees. No person is an official student until all charges have been paid in full. Installment payment of tuition and fees is not permitted.

When a student drops a course, he is not entitled to remain in the class on an unofficial basis. Only those students who are officially enrolled have the privilege of attending classes. In special circumstances designed to help deserving students, the instructor and the Director of Student Affairs may make exceptions to this policy.

### **STUDENT LIFE**

Social and cultural activities play an important part in the life of the college student. Oftentimes, 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, students should be given the opportunity to develop to their full potential.

To this purpose then, some 21 clubs and organizations have been officially approved. One of the paramount organizations, the Student Assembly, uses both resources and fees of the student body to finance and plan many of the College's activities. In addition to the Student Assembly, clubs include religious, political,

social, and recreational organizations. Activities of the various clubs and organizations are coordinated at weekly or bi-monthly meetings.

### **ATHLETIC PROGRAM**

Tennis has been the first intercollegiate competitive sport to be organized at Central Texas College. During its first season, 1968-69, the tennis team placed third in the nation in the National Junior College Tournament at Ocala, Florida.

Other athletic Intramural programs have been organized for both men and women. They include football, basketball, volleyball, bowling, table tennis, and tennis. Teams compete for recognition and trophies awarded by the Physical Education Department.

All athletic facilities in the college gymnasium remain open daily in order to serve the resident students at Central Texas College.

### **STUDENT CENTER**

Central Texas College has a beautiful Student Center, complete with a bookstore, dining area and inner landscaped court, snack bar, a carpeted conversation area with wood-burning fireplace, beamed ceiling, and color television.

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

### **STUDENT CONDUCT**

Through enrollment at Central Texas College, the student signifies that he recognizes and accepts the authority of the College in regulating his conduct, and he agrees to abide by all regulations and rules established by the College.

The student does not give up any of his rights by enrolling in the College. He will be treated fairly and with due process in all matters involving disciplinary action.

Violation of federal laws, state laws, or city ordinances renders the student subject to disciplinary action by the College. The drinking of alcoholic beverages, the use, possession, or sale of illegal drugs or narcotics, participation in gambling, immoral conduct, and dishonesty render the student subject to disciplinary action.

All students are required to show proper respect for College personnel and classmates and to observe usual standards of conduct acceptable in polite society.

Membership in secret organizations of any kind is prohibited. Hazing in any form, physical or mental, is prohibited. Any students who publish, aid in publishing, circulate, or aid in circulating anonymous materials are subject to disciplinary action.

### **CAMPUS DRESS**

Students will be required to dress appropriately everywhere on the campus at all times. Students in special areas (for example, physical education and laboratories) may require particular clothing for suitability and safety; but, in general, appropriate dress for women is considered to be suits, dresses or skirts of appropriate length, and sweaters or blouses; for men, suits, full-length trousers, shirts, and sweaters or jackets. Shoes are included in appropriate dress. Personal hygiene and grooming must conform to standards of cleanliness and neatness acceptable in polite society. Beards and uncommonly long hair are not permitted.

A positive requirement for appropriate dress and grooming is based on the philosophy that these factors have a direct bearing on the attitudes and behavior of students and, thereby, on their educational performance and the general environment required for meeting the educational philosophy and objectives of the College.

### **STUDENT DISCIPLINE**

The teaching obligations and other educational duties and responsibilities of the faculty and administration of Central Texas College require that they shall have the authority to establish and maintain standards of ethical, moral, and personal conduct for all students enrolled in the College. All students are expected to conduct themselves in accordance with the generally accepted standards of good behavior and good taste. It should be clearly understood by all students who are permitted to enroll that the College Administration has the authority to take proper disciplinary action against students who conduct themselves contrary to the standards above mentioned or in a manner contrary to the rules and regulations of the College. The disciplinary action may take the form of being warned, censored, placed on disciplinary probation, required to withdraw from a course or courses, suspended, or expelled from the College.

Disciplinary action is not primarily a punishment for violation of regulations, but is an action taken on the basis of the judgment of College officials as to whether a particular student, at a particular time, has proper attitudes and conduct which enable him to profit from the educational process.



The philosophy of discipline at Central Texas College is therefore positive rather than negative. The rationale is not that of punitive action for violation of law, but rather is that of taking proper disciplinary measures on the basis of a determination of a particular student's amenability to the educational process at a given time.

### SCHOLASTIC HONESTY

All students of Central Texas College are required and expected to maintain the highest standards of scholastic honesty in the preparation of all work and in examinations. Each student should avoid:

1. Plagiarism—the taking of passages from writings of others without giving proper credit to the source.
2. Collusion—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 an examination.

Students found guilty of scholastic dishonesty are subject to appropriate disciplinary action as defined previously in this catalogue and, in addition, are subject to having credit for courses cancelled. Such cancellation may be removed only by repeating the course(s).

### ABSENCES AND TARDINESS

Students are required to attend classes regularly. No unexcused absences or "cuts" are allowed. You are responsible for all class work covered during an absence from class, even in cases where you were able to satisfy the instructor that the absence was unavoidable. Failure to attend class regularly may result in administrative withdrawal of a student from a class or from College. Excusable absences are those resulting from personal illness, emergencies arising within the family, official school-sponsored trips (approved by the Dean), and military duties or orders requiring brief absences.

Students are expected to be in class on time.

The following specific rules apply to absences:

1. Each instructor shall keep a record of class attendance and shall determine when a student's absence is excused. Instructors will have the responsibility of notifying students when they are accumulating too many unexcused absences. After the instructor submits the form to the Office of Student Affairs requesting an administrative drop because of unexcused absences, the instructor will receive a copy of the letter which is sent to the student or parents.

2. An administrative drop is initiated after a student has six consecutive or ten total unexcused absences. Absences are computed on class hours of instruction. Example: A class meeting for 1½ hours results in 1½ absences.
3. The Dean will not grant excuses for absences. The student may be readmitted to class by the Dean, but his absence(s) will remain unexcused.

## **ATTENDANCE RULES FOR STUDENTS ON PROBATION**

A student on scholastic probation must attend classes regularly. He will be required to sign a probation agreement in the Office of Student Affairs and to adhere to the rules governing same.

## **EXAMINATIONS**

Semester examinations are given at the end of each semester or summer term in all subjects. During the last week of classes, no college-sponsored social activities are permitted since students should be preparing for examinations.

All students are required to take examinations when scheduled unless excused by the Dean because of personal illness or some emergency approved by the Dean. Otherwise, the student receives a grade of "F" for the course. The Dean of the College should be notified immediately when a student finds it impossible to take his examination as scheduled so that arrangements for a postponed examination may be requested. If postponed examinations are approved, the student must take them as soon as he has recovered from his illness or his emergency has ended. In any case, the examination must be completed prior to the close of the semester immediately following the one in which the examination should have been taken.

At the close of each semester or summer term, grade reports are mailed to the parents of all students. Self-supporting students under twenty-one years of age and not residing legally with their parents and students twenty-one years of age or older may request that their grades be mailed to themselves. Requests from students under twenty-one years of age require approval of the Director of Student Affairs.

## **WITHDRAWAL FROM COLLEGE**

In order to be officially withdrawn from the College a student must obtain and complete a withdrawal form and have it signed as indicated thereon. The student's transcript will show W, WP, or

WF, depending upon whether the student is passing or failing in his courses at the time of withdrawal.

An administrative withdrawal results when a student is absent from classes an excessive number of times without good reason and without notifying the Director of Student Affairs of the cause of absence. In such cases, the student is dropped from all classes, constituting withdrawal from the College, and a grade of "F" is recorded for all courses in which he was enrolled.

### **SUMMONS TO ADMINISTRATIVE OFFICES**

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.

### **PARKING REGULATIONS**

All campus parking and traffic regulations are printed in the Student Information Book. Each student is responsible for understanding and complying with these regulations.

### **CHANGE OF ADDRESS**

If a change occurs in a student's permanent mailing address or in his residence address while attending College, he is required to give prompt notification to the Records Office.

The student is responsible for all communications mailed to him at the latest address he has given to the College. Having moved from a previous address does not relieve the student of responsibility for requests made to him through correspondence.

### **DORMITORIES**

Central Texas College operates two beautiful, air-conditioned dormitories, one for ladies and one for gentlemen. Requests are honored on a first come, first served basis. A reservation deposit of \$25.00 is required for each application for a room. A complete food service is available in the luxurious Student Services Occupation Center. Additional information is available from the Director of Student Affairs.

### **HOUSING POLICY**

The dormitory housing program at Central Texas College is a part of the total educational plan of the College. All students who come from outside the College district and who desire to have

housing within the College district while attending the College will be required to reside in the College dormitories.

Exception to this requirement will be made for students who come within any one of the following categories:

1. Those who live with parents or with relatives by sanguinity.
2. Married students who live with their spouses.
3. Students whose health conditions demand special attention which would not be available in the dormitories. A letter from a physician is required in such cases.

If college housing is not available, sophomore students may be permitted to live in off-campus housing until such time as they can be admitted to the dormitories. A student who gives false information concerning his place of residency will be subject to appropriate disciplinary action.

The President of the College is authorized to adopt such operational rules and procedures as are necessary for implementation of this housing policy.

## COURSE PLANNING

Proper planning of courses is a very important matter for each student in order to assure that his individual objectives may be achieved. Each student at Central Texas College will have appropriate guidance in his educational planning, and every effort will be made to help the student achieve his goal. Final responsibility for a proper and successful educational venture rests with the student.

## ACADEMIC LOAD

**Standard Load:** The actual number of semester hours taken by a full-time student will vary with the number of one-hour courses and laboratory courses taken. While the standard load is considered to be fifteen semester hours, the actual hours for five solid courses plus physical education might be seventeen or eighteen semester hours. The normal load for completing degree requirements in two school years is five solid courses per semester, plus the required and/or elective one-hour courses which are taken in addition.

**Maximum Load:** Students are not permitted to take more than five courses of three or more semester hours value each during a semester. Additional one-hour courses may be taken in certain approved subject areas, but the total hours per semester may not exceed nineteen.



If a student is in his last semester prior to graduation and must have extra hours to fulfill graduation requirements, he may take the extra hours if approval is received from the Dean of the College.

**Minimum Load:** Since part-time as well as full-time students are welcome at Central Texas College, no minimum number of hours is required. Students who do not work and who are seeking a college degree are encouraged to take the maximum number of hours per semester. Students who plan to work part-time and students who may have difficulty with college level courses are encouraged to consult the academic counselor for advice on the number of hours that should be taken.

### ADDING AND/OR DROPPING COURSES

After official registration has been completed, a day student may add or drop courses only after receiving approval of the Director of Student Affairs. The Director of the Evening College will approve course changes for Evening College students. A deadline date will be announced each semester, and no classes may be added after that date. Any classes dropped after the deadline will appear on the student's transcript with the appropriate designation of "W," "WP," or "WF."

A course may be added or dropped officially by completing appropriate forms and securing approval. A course is not dropped merely by not attending class. Students who fail to complete proper forms for dropping a class and who absent themselves from class may be dropped from the rolls upon recommendation of the instructor and approval of the appropriate administrator.

### SCHOLASTIC STANDARDS

Each student is expected to know his academic status at all times. Each student is responsible for knowing whether he has passed the minimum required work and whether he is eligible to continue in the college. An ineligible student who nevertheless registers in the college shall be dropped, and the student shall not receive special consideration on his plea of lack of knowledge of his scholastic status. Student scholastic probation or suspension will be printed on the semester grade report. To be in good standing, a student is required to maintain at least an overall semester average of 1.8. Those who fall below the 1.8 average will be placed on academic probation and will be required to have monthly conferences with the academic counselor. The purpose of such conferences will be to determine the cause of unsatisfactory work, to advise the student on ways to improve grades, to

offer any assistance which college personnel might render, or to warn the student of pending disciplinary action, as the circumstances might require.

### SCHOLASTIC PROBATION

A student at Central Texas College must achieve a 1.8 semester grade point average to avoid being placed on probationary status. If placed on probationary status, then the student must the following semester achieve a 1.8 average. If the student is placed on academic probation he will be required to have a monthly conference with an academic counselor. If the student's performance should improve to the required standards upon the completion of one full semester, he will be removed from the probation status. Failure to achieve a 1.8 grade point average will result in the student's being suspended from the College for a period of one semester. Upon readmission, the student will again be placed on scholastic probation for the semester. Failure to meet the required standards after being readmitted will result in the student's being suspended from the College for two regular semesters. Upon readmission, the student will again be placed on scholastic probation for the semester. Failure to meet the required standards after being readmitted will result in the student's being suspended from the College for four regular semesters. The student must realize that he still must achieve a 2.0 accumulative grade point average to qualify for graduation and that any course grade below "C" is normally not transferable to four-year institutions.

Any Central Texas College student failing to achieve a 1.0 semester grade point average during any given semester will be suspended immediately from Central Texas College for two regular semesters and will be placed on academic probation when readmitted to the college.

Residence hall students are required to be full-time students (enrolled in twelve or more semester hours).

A student on scholastic probation must attend classes regularly. He will be required to sign a probation agreement in the Student Affairs Office and to adhere to the rules therein.

### CLASSIFICATION OF STUDENTS

**Freshman**—A student with thirty semester hours or less recorded on his permanent record will be classified as a freshman.

**Sophomore**—A student with thirty-one semester hours or more recorded on his permanent record will be classified as a sophomore.

**Maximum Hours for Transfer**—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 amount unless he secures written permission from his senior college choice.

## **TRANSFER OF COURSES TO OTHER COLLEGES**

If a student chooses his courses in conformity with the degree requirements of his senior college choice, and if he earns a grade of "C" or better, he will have no difficulty in transferring his work, hour for hour, with the same grade earned.

Since the types of courses required for the same major may vary with different colleges, it is important that each student have a degree planning conference with the academic counselor prior to registering for classes.

## **TRANSCRIPTS**

A Permanent Record showing the academic record of each student will be maintained by the College. A transcript will be supplied to the Registrar at the college or university which the student expects to attend after transferring from Central Texas College. This first transcript is provided at no cost. An appropriate fee will be charged for all subsequent transcripts requested. No transcripts will be released for students who have delinquent records of any kind at Central Texas College.

## **CLASS HOURS**

College classes are in progress five days per week. Classes meeting on Monday, Wednesday, and Friday are one hour in length. Classes meeting Tuesday and Thursday meet for one and one-half hours. Courses with laboratories require additional time.

## **TEXTBOOKS**

Students may purchase their textbooks and supplies from the College bookstore. Books may be resold to the bookstore at the end of a semester at a discounted price provided they are in good condition and have not been discontinued.

## **GRADES AND POINT AVERAGES**

Grading at Central Texas College is as follows:

Numerical Value	Grade
90-100	A=Superior (4 points per semester hour)
80- 89	B=Above Average (3 points per semester hour)
70- 79	C=Average (2 points per semester hour)
60- 69	*D=Passing, but Unsatisfactory (1 point per semester hour)
0- 59	F=Failure (0 points per semester hour)
	†I=Incomplete
	WP=Withdrawn Passing
	WF=Withdrawn Failing
	NC=Non-Credit

## HONOR ROLL

Each semester, those students whose scholastic achievement is notable are given public 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 twelve or more semester hours for the preceding semester and who have no grades lower than "B." Students who carry a minimum of fifteen semester hours and who meet this scholastic requirement are also eligible for membership in Phi Theta Kappa, the National Junior College Scholarship Society.

## ENRICHED STUDIES PROGRAM

Central Texas College recognizes that a certain percentage of the student body is capable of mastering and profiting from enriched educational experiences. Therefore, special opportunities are provided in various subject fields for those students who are identified as the intellectually gifted, the creative and talented, and the more able students. Selective enrollment in the areas of English Composition and Literature, as well as American History, Mathematics, and Government is available.

## COURSE NUMBERS

Course numbers contain three digits. If the first digit is a "1" it indicates a freshman level course. If the first digit is a "2" or "3" it indicates a sophomore level course. The second digit indicates the

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\*Students who receive a "D" grade are advised not to enroll in the next course for which this course was a prerequisite.

†An Incomplete grade may be given only in those cases where, because of personal illness, death in the immediate family, school sponsored trip, or military orders, the student is unable to complete the final examination for a course. Prior approval from the instructor is required before the grade of "I" is recorded. A student who merely fails to show up for the final examination will receive a zero for the final and an "F" for the course.



semester hour value of the course. The third digit indicates the order in which the course is to be taken. (Example: English 131 is a freshman course with three semester hours credit and should be passed with a satisfactory grade before taking English 132.)

The numbers in parentheses found to the right of a course title indicate the number of lecture and laboratory hours per week. For example, Biology 141 would show (3-3) indicating three lecture meetings and three hours of laboratory per week.

## CURRICULA

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. Courses listed in the catalogue will be selected in appropriate sequence for offering on the schedule of classes from semester to semester.

ALTHOUGH ACADEMIC COUNSELING IS AVAILABLE, IT WILL REMAIN THE RESPONSIBILITY OF EACH STUDENT TO DETERMINE HIS MAJOR AREA OF STUDY, THE SENIOR COLLEGE OR UNIVERSITY TO WHICH HE WISHES TO TRANSFER, AND THE REQUIRED COURSES AND THEIR PREREQUISITES.

## DIVISION OF ARTS AND SCIENCES

### AGRICULTURE DEPARTMENT

#### Suggested Curriculum for Agriculture Majors Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Biology 141 .....	4	Biology 142 .....	4
English 131 .....	3	English 132 .....	3
History 131 .....	3	History 132 .....	3
Animal Husbandry 131 .....	3	Poultry Science 136 .....	3
Agronomy 132 .....	3	Elective .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		17
	18		

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Chemistry 141 .....	4	Chemistry 142 .....	4
Economics 231 .....	3	Economics 232 .....	3
Government 231 .....	3	Government 232 .....	3
Entomology 234 .....	3	*Elective .....	3
Mathematics 131 .....	3	*Elective .....	3
Physical Education .....	1	Physical Education .....	1
	17		17

### COURSE DESCRIPTIONS

#### 131. Animal Husbandry. (3-2). 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. (010401)

#### 132. Agronomy. (3-2). 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. (010301)

\*Elective must be, in agriculture. Students should check the senior college catalogue for recommended electives.

**133. 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 consideration of specific plans and methods for its rehabilitation, maintenance, and increase. (011001)

**134. Range Management. (3-2). 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. (010303)

**135. Soil Science. (3-2). 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. (010201)

**136. Poultry Science. (3-2). Credit 3.**

A basic course in poultry production involving breeds, breeding, selection, feeding, care, and management. Marketing is emphasized because it is a specialized industry. (010901)

**231. Farm Mechanics. (3-3). Credit 3.**

Basic farm shop skills in tool conditions, sketching, carpentry, painting, rope work, concrete, soldering, cold metal work, basic welding. (011101)

**232. Farm Mechanics. (3-3). Credit 3.**

A second course in farm shop skills for the farm and ranch student. Repair and maintenance of farm machinery principles of gasoline engine and diesel engine; construction of fences and feed lot equipment; oxygen and acetylene welding; farm survey drainage and earthen construction. Prerequisite: Farm Mechanics 231. (011102)

**233. Feeds and Feeding. (3-0). Credit 3.**

Chemical composition of feeds, nutrients, requirements of farm animals, utilization of feeds, formulating and balancing rations. (010404)

**234. Entomology. (3-2). 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. (010201)

**235. Horticulture. (3-2). Credit 3.**

Growth and structure of fruit, vegetable, and ornamental

plants. Effects of environment on plant production and principles and methods of propagation. (010701)

### **236. Livestock Marketing. (3-0). 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.

## **BUSINESS ADMINISTRATION DEPARTMENT**

### **Freshman Year**

<b>First Semester</b>		<b>Second Semester</b>	
<b>Subject</b>	<b>Hours</b>	<b>Subject</b>	<b>Hours</b>
English 131.....	3	English 132.....	3
Approved Math .....	3	Approved Math .....	3
Science 141 .....	4	Science 142 .....	4
History 131 .....	3	History 132 .....	3
Economics 231 .....	3	Economics 232 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		17
	18		

### **Sophomore Year**

<b>First Semester</b>		<b>Second Semester</b>	
<b>Subject</b>	<b>Hours</b>	<b>Subject</b>	<b>Hours</b>
English 231.....	3	English 232.....	3
Government 231 .....	3	Government 232 .....	3
Accounting 241 .....	4	Accounting 242 .....	4
Psychology 231.....	3	Prog. Bus. Statistics 230 .....	3
Elective .....	3	Speech 233 .....	3
Physical Education .....	1	Physical Education .....	1
	17		17

## **COURSE DESCRIPTIONS**

### **230. Programming for Business Statistics. (3-3). Credit 3.**

Computer components and languages with emphasis on FORTRAN; heuristic and algorithmic computing techniques; flowcharting; applications to measures of central tendency, variation, index numbers, curve fitting for time series; impact of computer systems on decision making. Prerequisite: Six hours of mathematics. (030606)

\*B.B.A. majors may substitute one year of accounting for the one year of science or languages to meet associate degree requirements. Senior college degree requirements vary considerably. Students should check the specific catalogue for exact requirements.



**231. Principles of Economics. (3-0). Credit 3.**

Introduction to economic analysis; price-level changes; the creation of money; the Federal Reserve System and monetary policy; the national accounts; the consumption function; taxation; fiscal policy; public debt; the theory of economic growth; population problems. (180301)

**232. Principles of Economics. (3-0). Credit 3.**

Determination of relative prices; consumer demand analysis; the competitive firm; agricultural policy; the monopolistic firm; imperfect competition; business organization and government regulation; determinants of demand for productive resources; rent, interest, and profit; unions and manpower problems; a microeconomic view of taxation and public expenditure; regional economies; international trade and finance; foreign economic policy. (180301)

**233. Intermediate Accounting. (2-3). Credit 3.**

Working papers and preparation of statements; correction of books and statements; special phases of corporation accounting; cash and receivables; inventories, investments. Prerequisite: Accounting 242. (Adult Program). (030102)

**234. Intermediate Accounting. (2-3). Credit 3.**

Investments; tangible and intangible fixed assets; liabilities; reserves; statement analysis; business combinations, reorganizations; price-level impact on financial statements. (030102)

**237. Cost Accounting. (3-0). Credit 3.**

Cost accounting principles relating to material, labor, and manufacturing expenses; cost accounting practices and procedures; process cost accounting. Prerequisite: Accounting 242. (030108)

**238. Auditing. (3-0). Credit 3.**

Auditing procedures used by internal auditors and independent public accountants; preparation of working papers. (030107)

**241. Principles of Accounting. (3-3). Credit 4.**

Analysis and recording of business transactions; use of journal and ledger; accounting statements; payroll records and payroll taxes; introduction to partnership accounting; special journals and ledgers; vouchers system. (030101)

**242. Principles of Accounting. (3-3). Credit 4.**

Continuation of Accounting 241. Internal control; partnership and corporation accounting; accounting for manufacturing concerns; analysis and interpretation of statements. Prerequisite: Accounting 241. (030101)

## COMMUNICATIONS DEPARTMENT (English, Speech, Journalism)

### Suggested Curriculum for English Majors

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
**English 131.....	3	English 132.....	3
Mathematics 131.....	3	Mathematics 132.....	3
*Foreign Language 141.....	4	*Foreign Language 142.....	4
*Science 141.....	4	*Science 142.....	4
History 131.....	3	History 132.....	3
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		
	19		18

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231.....	3	English 232.....	3
Foreign Language 231.....	3	Foreign Language 232.....	3
Science 141.....	4	Science 142.....	4
Government 231.....	3	Government 232.....	3
Elective.....	3	Elective.....	3
Physical Education.....	1	Physical Education.....	1
	17		17

## COURSE DESCRIPTIONS

### 111. Reading and Comprehension. (1-1). Credit 1.

A course designed to remedy a student's reading disability and to improve his reading speed, comprehension, and vocabulary. May be taken twice for credit since course is taught on basis of individual level of achievement. (070101)

### 121. Speed Reading and Comprehension. (1-2). Credit 2.

A course designed to increase rate of reading and comprehension. Some attention is given to vocabulary building, but primary emphasis is upon techniques of rapid reading and increasing the percentage of comprehension. (170102)

### 130. English Fundamentals. (3-0). Credit 3.

A study of basic compositional skills with emphasis on sentence structure and paragraph structure. (070101)

### 131. Composition and Rhetoric. (3-0). Credit 3.

Composition of short papers, with emphasis on sentence structure, paragraph development, and paper organization. Analysis of expository prose. (070102)

\*Check particular foreign language and science required by senior institution where student wishes to transfer.

\*\*Students planning to transfer to the University of Texas should begin with English 132. The first course is no longer eligible to meet degree requirements.

**132. Composition and Rhetoric. (3-0). Credit 3.**

Continuation of English 131. More complex methods of paper development; investigative papers. Selected readings. Prerequisite: English 131 or advanced standing. (070102)

**133. English for Foreign Students. (3-0). Credit 3.**

Speaking and writing for students whose native language is not English. Students entering course are expected to be able to communicate in English. (070201)

**231. English Literature. (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: English 131, 132. (070305)

**232. English Literature. (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: English 131, 132. (070305)

**233, 234. Western World Literature. (3-0). Credit 6.**

A study of masterpieces of Western World Literature from Homer through the First World War. Prerequisites: English 131, 132 or the equivalent. (070313)

**\*236. Shakespeare. (3-0). Credit 3.**

Study of major plays of Shakespeare, with lectures on his art, his language, and his cultural environment. Prerequisite: English 132. (070306)

**237. American Literature. (3-0). Credit 3.**

A survey of the best American prose and poetry, beginning with Edward Taylor and continuing through the present writers. Prerequisites: English 131, 132. (070304)

**Suggested Curriculum for Speech Majors**

Freshman Year			
First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
History 131 .....	3	History 132 .....	3
Foreign Language 141 .....	4	Foreign Language 142 .....	4
Speech 131 .....	3	Speech 132 .....	3
Theatre 131 .....	3	Speech 133 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	18		17

\*Students who plan to transfer to Texas A&M University should take English 236 instead of English 237.

## Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231.....	3	English 232.....	3
Government 231 .....	3	Government 232 .....	3
Foreign Language 231 .....	3	Foreign Language 232 .....	3
Speech 231 .....	3	Speech 232 .....	3
Elective .....	3	Elective .....	3
Physical Education .....	1	Physical Education .....	1
	16		16

## COURSE DESCRIPTIONS

**111, 112. Speech Laboratory. (0-2). Credit 2.**

A laboratory for rehearsal and execution of department projects and demonstrations of related speech activities. (040308)

**131. Fundamentals of Effective Speech. (3-0). Credit 3.**

Instruction in the theory of the voice, articulation, pronunciation, bodily activity, language, and the elements of speech preparation. Practice in the presentation of speeches and printed material with emphasis on the use of fundamentals of speech production. A study of speech construction, including the use of outlining and supporting materials. Practice is given in outlining, preparing, and presenting special types of speeches with emphasis on extemporaneous speaking. (040302)

**132. Voice and Diction. (3-0). Credit 3.**

To develop and establish a good voice habit through a study of the principles and practice of the techniques involved in excellence of voice and diction. Drill work and materials for practice are selected to suit individual needs. (040303)

**133. Debate. (3-0). Credit 3.**

The study of the principles of argumentation and debate. Practice in preparing written and spoken arguments are afforded in this course. (040310)

**231. Interpretive Reading. (3-0). Credit 3.**

Intensive study and practice in the analysis and oral interpretation of the short story, ballad, narrative poem, lyric, sonnet, essay, and the drama. Prerequisite: Speech 131. (040311)

**232. Persuasive Speaking. (3-0). Credit 3.**

The techniques of persuasion and audience analysis. A study of speech as a motivating force in human conduct. Organization and practice in speaking; reading and discussion of current speeches. Recommended to students interested in sales and advertising. (040309)

**233. Business Speech. (3-0). Credit 3.**

Designed to aid the prospective business or professional person in preparing various types of speaking assignments such as he might encounter in his career. It is planned for agriculture, business, and home economics majors, and for other students seeking one course in public speaking. Emphasis is upon structure and techniques of presentation. (040307)

**234. Parliamentary Procedure. (3-0). Credit 3.**

Parliamentary procedure and rules of order as needed by club leaders and sponsors of school clubs. Meets on an organized basis for practice in conducting meetings. (040305)

**235. Voice and Phonetics. (3-0). Credit 3.**

A study of the voice mechanism and the International Phonetic Alphabet in order that the student may improve vocal performances and correct careless and ineffective speech habits. (040304)

**Suggested Curriculum for Journalism Majors****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Journalism 131 .....	3	Journalism 132 .....	3
English 131 .....	3	English 132 .....	3
History 131 .....	3	History 132 .....	3
Speech 131 .....	3	Psychology 231 .....	3
*Elective .....	3	*Elective .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		16
	17		

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Journalism 231 .....	3	Journalism 212 .....	1
English 231 .....	3	English 232 .....	3
Government 231 .....	3	Government 232 .....	3
Economics 231 .....	3	Economics 232 .....	3
*Elective .....	3	*Elective .....	3
Physical Education .....	1	Elective .....	3
	16	Physical Education .....	1
			17

**COURSE DESCRIPTIONS****111, 112. Journalism Laboratory. (0-2). Credit 2.**

Application of journalism principles in production of College publications. Offered for terminal credit, but may be accepted by some colleges. (120401)

\*Recommended: Math 131 and 133 may be substituted for second year language.

**211, 212. Journalism Laboratory. (0-2). Credit 2.**

Application of journalism principles in production of College publications. Offered for terminal credit, but may be accepted by some colleges. (120401)

**131. Communications Media and Principles. (3-0). Credit 3.**

Introductory survey of mass communications media, their purpose and methods of operation to give the journalism major a panoramic view and the non-major an understanding of importance of communications media in modern society. (120101)

**132. News Gathering and Reporting. (3-3). Credit 3.**

Instruction and practice in interviewing and writing; discussion of news sources, news values, and various types of news stories. Prerequisites: Journalism 131, English 131. (120108)

**\*\*231. News Editing and Copy Reading. (2-2). Credit 3.**

A comprehensive study of copy editing and errors of fact and interpretation of English and newspaper style: headline writing; proof reading and page make-up. Fundamentals of typography as related to newspaper make-up are stressed. (120105)

**EDUCATION DEPARTMENT****Suggested Curriculum****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131.....	3	English 132.....	3
History 131 .....	3	History 132 .....	3
Science 141 .....	4	Science 142 .....	4
Foreign Language 141 .....	4	Foreign Language 142 .....	4
Elective .....	3	Speech 131 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		18
	19		

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231.....	3	English 232.....	3
Government 231 .....	3	Government 232 .....	3
* Foreign Language 231 .....	3	* Foreign Language 232 .....	3
Psychology 231 .....	3	Psychology 232 .....	3
Sociology 231 .....	3	Sociology 232 .....	3
Physical Education .....	1	Physical Education .....	1
	16		16

\*Foreign Language recommended.

\*\*Students should check the catalogue of the senior college to which they plan to transfer before registering for this course.



## COURSE DESCRIPTIONS

### **231. Introduction to Education. (3-0). Credit 3.**

Designed to give an overview of the aims, organization, and procedures of the whole field of education, and to furnish information regarding the opportunities and requirements in education as a profession. (050103)

### **232. Educational Psychology. (3-0). Credit 3.**

A study of the psychology of education, including the aims and needs of education, the behavior of children, the learning process, and modification of responses through education. (050102)

### **233. Driver Education. (2-2). Credit 3.**

The study of skills and driving habits; operation of the motor vehicle; safety; national, state, and local motor laws. (090208)

### **234. The Teaching of Reading in the Elementary School. (3-0). Credit 3.**

Study of the reading process and the factors which condition its development. The importance of reading in school and in life serves as a background for critical evaluation of the methods and materials of reading instruction. Consideration is given to such topics as reading readiness, measurements, diagnosis, remedial reading, and the various instruments developed for use in the field of reading. (050202)

### **235. The Teaching of Language Arts in the Elementary School. (3-0). Credit 3.**

This course deals with the principles, problems, and language in the upper elementary grades. Correct use of the language function in conveying ideas interestingly and adequately in social activities is stressed. A study is made of state texts, library books, and other teaching material. (050203)

### **236. Children's Literature. (3-0). Credit 3.**

This is a course in the teaching of children's literature, a study of children's literature itself, of the pioneers in the field, and of the writers of the present day. (070312)

### **237. Teaching of Arithmetic in the Elementary School. (3-0). Credit 3.**

Consideration is given to recent research studies in the teaching of arithmetic as well as to recommend techniques. (050202)

# ENGINEERING DEPARTMENT

## Suggested Curriculum

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Engineering 131 .....	3	Engineering 132 .....	3
Mathematics 134 .....	3	Mathematics 232 .....	3
Mathematics 231 .....	3	Elective .....	3
English 131 .....	3	English 132 .....	3
*Science 141 .....	4	*Science 142 .....	4
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		17
	18		

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
History 131 .....	3	History 132 .....	3
†English 231 .....	3	†English 232 .....	3
Government 231 .....	3	Government 232 .....	3
**Engineering Elective .....	3	Structural Drafting 244 .....	4
Physics 241 .....	4	Physics 242 .....	4
Physical Education .....	1	Physical Education .....	1
	17		18

## COURSE DESCRIPTIONS

### 111. Engineering Problems. (1-0). Credit 1.

This is an introductory course in engineering problems for students of physics and engineering, which includes elementary statics, dynamics, and the use of slide rule. Emphasis is given to the engineering method of analysis in problem solving. (060102)

### 131. Engineering Graphics. (2-4). Credit 3.

Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projection drawings, geometry of graphical construction, graphical design. Required for beginning engineering students. (060806)

\*Check senior college catalogue for specific science. Variations occur with different engineering majors.

†Check senior college catalogue to see if Technical English is required.

\*\*Check senior college catalogue for specific engineering course(s) required. Variations occur with different engineering majors.

**132. Descriptive Geometry. (2-4). Credit 3.**

Principles of descriptive geometry and their application to engineering architecture, and geology. Includes methods of graphical representation and determination of visibility; auxiliary and oblique views; point, line and plane problems; intersections of surfaces and developments; warped surfaces and engineering, geology and mining problems. (060804)

**133. Drafting. (2-4). Credit 3.**

Engineering lettering, orthographic projection, pictorial drawing and sketching. (060801)

**134. Drawing. (2-4). Credit 3.**

Freehand drawing, training in observation and delineation, elementary visual perspective. (060802)

**Civil Engineering****135, 136. Plane and Topographic Surveying. (3-3). Credit 6.**

Use and care of instruments; note keeping; distance measurements; traverse surveying; areas; angles and elevations; legal principles; elementary map making. Plane-table 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. (060402)

**137. Route Surveying. (3-3). Credit 3.**

Route location, mathematics of compound, spiraled, and vertical curves; field astronomy; earthwork calculations; mass diagram. (060403)

**138. Mechanics of Materials. (3-0). Credit 3.**

Stresses; deformation; stress strain properties; mechanics of thin-walled cylinders, beams, shafts, columns, riveted and welded joints; elastic deflections in beams, combined loading, combined stresses. (060205)

**231. Engineering Mechanics. (3-0). Credit 3.**

Introduction to basic mechanics, particle motion, Newton's law, work-energy and impulse-momentum, principles for particles; force resultants, introductory rigid body statics. (060703)

**Electrical Engineering****241, 242. Fundamentals of Electrical Engineering. (2-4). Credit 8.**

Fundamental relationships of electricity and magnetism. Analysis of direct-currents circuits under steady state and transient conditions. Solution of magnetic circuits. Introduction to

alternating currents. Mathematical and physical treatment of force actions and energy relations in electrostatic and electromagnetic fields; capacitance and inductance of systems of conductors; ferromagnetism, permanent magnets; combined electric and magnetic field. (060501).

**243. Electricity and Magnetism. (2-4). Credit 4.**

Lectures, recitations, and problems in electricity and magnetism. A laboratory investigation of the phenomena studied in the textbook. (060502)

## FINE ARTS DEPARTMENT

(Art, Theatre Arts)

### Suggested Curriculum for Art Majors

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131.....	3	English 132.....	3
History 131 .....	3	History 132 .....	3
Foreign Language 141 .....	4	Foreign Language 142 .....	4
*Art (two courses) .....	6	*Art (two courses) .....	6
Psychology 111 .....	1	Physical Education .....	1
Physical Education .....	1		17
	18		

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231.....	3	English 232.....	3
Government 231 .....	3	Government 232 .....	3
*Art (two courses) .....	6	*Art (two courses) .....	6
Foreign Language 231 .....	3	Foreign Language 232 .....	3
Physical Education .....	1	Physical Education .....	1
	16		16

## COURSE DESCRIPTIONS

**131, 132. Freehand Drawing. (2-4). Credit 6.**

Drawing in charcoal, pencil, pen, wash, conte crayon, and pastel. The subject matter is varied with emphasis on the human figure. A study of both abstractions and expressive drawing is included. (020702)

**133, 134. Creative Design. (2-4). Credit 6.**

A basic course in the fundamentals of color and form, the elements and principles of design and color theory. (020303)

**135. Color Composition. (2-4). Credit 3.**

Theory of color and form involving definite technical pro-

Students should check the catalogue of the senior college to which they plan to transfer for particular Art course(s).

cedures in the various properties of color theories and their application to painting. Media: watercolor and oil. (020302)

**136. Figure Drawing. (2-4). Credit 3.**

Quick sketches in pencil, conte, and charcoal of draped living models. Introduction to handling of form, movement and proportion through the study of line, three dimensional form, dark and light, and composition. (020703)

**137. Landscape Composition. (2-4). Credit 3.**

Introduction to landscape composition and the handling of problems encountered in relation to form, movement, and dark and light to control composition. Media: pencil, conte, and charcoal. Prerequisites: Art 131 and 134. (020302)

**138. History and Appreciation of Art. (3-0). Credit 3.**

An elementary survey course illustrated with lantern slides and moving pictures treating the Ancient to the Medieval periods, styles and great personalities in painting, sculpture, architecture, and the minor arts. No knowledge of art necessary. (020201)

**139. History and Appreciation of Art. (3-3). Credit 3.**

An elementary survey course treating styles and great personalities of the Renaissance period through contemporary art. A study of painting, sculpture, architecture, and the minor arts. No knowledge of art necessary. (020201)

**231. The Teaching of Art in the Elementary School. (3-0). Credit 3.**

Methods and techniques necessary for the direction of a program of creative art and handicrafts in the elementary grades. (021101)

**232. Oil Techniques. (2-4). Credit 3.**

Introduction to the techniques of oil painting, exploring the problems encountered in still life composition, object appearance conditioned to meet the requirements of controlled composition and aesthetic precepts. Prerequisites: Art 131, 133, and 135. (020901)

**233. Advanced Oil Painting. (2-4). Credit 3.**

A course designed to further the individual's skill in painting through the study of advanced problems in composition. Special investigation into the fundamental tenets of contemporary painting. Prerequisite: Art 232. (020902).

**234. Watercolor Painting. (2-4). Credit 3.**

Painting for second year students stressing problems of painting in watercolor with emphasis on composition and techniques. (020903)

**235. Commercial Art. (2-4). Credit 3.**

Principles of advertising, processing of reproduction, merchandise illustration, typography, and lettering and layout. Direct mail folder design, labels, points of purchase advertising, window cards, poster design. (020603).

**236. Graphic Media. (1-5). Credit 3.**

Techniques and exploration of personal style in the intaglio, relief, and serigraph methods of reproduction. Prerequisites: Art 131, 133, and 135. (020706)

**237. Pen and Ink Techniques. (2-4). Credit 3.**

Designed to give the student an opportunity to experiment with the various techniques used in pen and ink rendering. Study of the possibilities and limitations of this media, with special attention given to the study of line, three dimensional form, texture, light and dark, and composition. Prerequisites: Art 131 and 133. (020705)

**238. Landscape Watercolor. (2-4). Credit 3.**

Painting for second-year students stressing problems of landscape painting in watercolor with emphasis on composition and techniques. Prerequisites: Art 135 and 137. (020903)

**239. Landscape Oils. (2-4). Credit 3.**

This course is designed for the advanced student stressing the organization, composition, and techniques encountered in landscape painting. Prerequisites: Art 137 and 233. (020902)

**239a, 239b. Ceramics. (1-4). Credit 6.**

Making of pottery shapes by coil, slab, and moved methods; refining and using native clays; underglaze paintings; bisque and glaze firing; original pottery forms; treatment of pottery surfaces; mixing of glazes and their application to pottery. (020401)

**239c, 239d. Sculpture. (2-4). Credit 6.**

Elementary instruction in the principles of sculpture. Prerequisite: Art 132, or the equivalent, and approval of the instructor. (021001)



**239e, 239f. Creative Hobbies. (3-3). Credit 6.**

For recreational leaders, prospective teachers or workers with therapeutic art for hospital work, or for anyone wishing to develop a hobby. Study and practice of weaving, modeling, carving, leather craft, or textile printing, dyeing, enamel, and metal work, etc. Conducted as a workshop, each student choosing crafts of individual interest. (020801)

**THEATRE ARTS****Suggested Curriculum for Theatre Arts Majors****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Theatre 131.....	3	Theatre 132.....	3
Theatre 133.....	3	Theatre 134.....	3
English 131.....	3	English 132.....	3
History 131.....	3	History 132.....	3
*Foreign Language 141.....	4	*Foreign Language 142.....	4
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		
	18		17

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Theatre 231.....	3	Theatre 232.....	3
Theatre 233.....	3	Theatre 234.....	3
English 231.....	3	English 232.....	3
Government 231.....	3	Government 232.....	3
*Foreign Language 231.....	3	*Foreign Language 232.....	3
Physical Education.....	1	Physical Education.....	1
	16		16

**COURSE DESCRIPTIONS****131. Introductory Study of the Theatre. (2-4). Credit 3.**

A general survey of the major fields of theatre art. For students who have a limited theatrical experience or knowledge. Emphasis on the various types and styles of plays, elementary theory and practice of acting and directing, basic principles of technical production; methods of construction and handling of scenery, elementary problems in scene design, stage lighting, costume and costume design. Participation in major productions. (040201)

\*Recommended.

**132. The Contemporary Theatre. (3-0). Credit 3.**

Study of twentieth-century theatre and American, English, and Continental plays. (040203)

**133, 134. Introduction to Theatre Practice. (2-6). Credit 6.**

Stagecraft, stage properties, and make-up. (040204)

**231, 232. History of the Theatre. (3-0). Credit 6.**

Development of theatre art from the earliest times through the sixteenth century. History of the Theatre—Development of theatre art from the beginning of the seventeenth century through the nineteenth century. (040202)

**233. Acting I. (2-2). Credit 3.**

Detailed study of characterization through class assignment of individual roles and group rehearsing of scenes. Survey of styles of acting. Consideration of dialects. Application of class principles in departmental stage production. (040211)

**234. Acting II. (2-2). Credit 3.**

Study and practical experience in problems of creating characterization, with emphasis on developing vocal and physical skill in acting. (040212)

**235. Stagecraft. (2-4). Credit 3.**

General consideration of the art of the theatre as it relates to the stage scenery and light. Practical experience in designing construction of scenery and lighting for College productions. (040207)

## FOREIGN LANGUAGE DEPARTMENT

### Suggested Curriculum

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
Major Language 141 .....	4	Major Language 142 .....	4
*Mathematics.....	3	*Mathematics.....	3
History 131.....	3	History 132 .....	3
†Science 141 .....	4	†Science 142 .....	4
Physical Education .....	1	Physical Education .....	1
Psychology 111.....	1		
	19		18

\*Check senior college catalogue for substitute courses, if any, if desired.

†Science recommended.

‡Second language requirement varies with senior colleges. Check senior college catalogue carefully.

## Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231.....	3	English 232.....	3
Major Language 231 .....	3	Major Language 232 .....	3
Government 231 .....	3	Government 232 .....	3
†Science 141 .....	4	†Science 142 .....	4
†Second Language 141 .....	4	†Second Language 142 .....	4
Physical Education .....	1	Physical Education .....	1
	18		18

## COURSE DESCRIPTIONS

## French

**141. Beginning French. (3-2). Credit 4.**

This course includes basic grammar drill, pronunciation drill, simple reading, and conversation. (080401)

**142. Beginning French. (3-2). Credit 4.**

Elementary grammar is completed. Pronunciation, drill, and conversation based on reading are continued. Stress is given to everyday conversational phrases. Prerequisite: French 141. (080401)

**231. Intermediate French. (3-0). Credit 3.**

This course includes grammar review, composition, and reading of French masterpieces, with conversation based on material read. Prerequisites: French 141, 142, or two years of French in an accredited high school. (080402)

**232. Intermediate French. (3-0). Credit 3.**

This course continues the drill on syntax as needed for reading, composition, and conversation. Prerequisite: French 231. (080402)

## German

**141. Beginning German. (3-2). Credit 4.**

For those who have had no previous work in German. The essential grammar is taught through conversation. Small classes assure maximum personal attention and expression. Two laboratory hours per week are required for the memorization and presentation of German dialogues by the student. Folk songs are learned. (080501)

**142. Beginning German. (3-2). Credit 4.**

A continuation of German 141. Prerequisite: 141 or its equivalent. (080501)

**231, 232. Intermediate German. (3-0). Credit 6.**

Special emphasis on conversation, composition, and reading; phonographic recordings will be studied, analyzed, and memorized. Modern German writings will be read. Prerequisite: German 142 or its equivalent. (080502)

**Russian**

**141, 142. Beginning Russian. (3-2). Credit 8.**

Grammar explanations are held to a minimum, the essential grammar being taught inductively through conversation. The aims are good pronunciation and conversational ability within a limited vocabulary. Two laboratory hours per week are required. Russian 142 is a continuation of Russian 141. (081101)

**231, 232. Intermediate Russian. (3-0). Credit 6.**

Readings of selected texts from Russian writers; composition and conversation on topics of everyday life. Russian 232 is a continuation of Russian 231. (081102)

**Spanish**

**141. Beginning Spanish. (3-2). Credit 4.**

This course consists chiefly of the study of Spanish grammar and development of vocabulary. Conversation in Spanish is stressed. (081201)

**142. Beginning Spanish. (3-2). Credit 4.**

This course is a continuation of Spanish 141. Simple graded readings dealing principally with life in Spanish-American countries is introduced. Conversation in Spanish is stressed. Prerequisite: Spanish 141. (081201)

**231. Intermediate Spanish. (3-0). Credit 3.**

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. Prerequisites: Spanish 141, 142, or two years of Spanish in an accredited high school. (081202)

**232. Intermediate Spanish. (3-0). Credit 3.**

This course continues the readings from Spanish-American authors. Grammar, composition, and conversation are emphasized. Prerequisite: Spanish 231 or equivalent. (081202)

**233, 234. Spanish Literature. (3-0). Credit 6.**

Study of trends in Spanish and Spanish-American Literature with collateral reading and discussion. The second semester deals

with selections from dramas, novels, and poetry of Spain, Mexico, and South American countries. Prerequisites: Spanish 231, 232, or their equivalent. (081206)

## HOME ECONOMICS DEPARTMENT

### Suggested Curriculum for Home Economics Majors

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
History 131 .....	3	History 132 .....	3
Home Economics 131 .....	3	Home Economics 133 .....	3
Home Economics 132 .....	3	Home Economics 134 .....	3
Science 141 .....	4	Science 142 .....	4
Psychology 111 .....	1	Physical Education .....	1
Physical Education .....	1		17
	18		

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231 .....	3	English 232 .....	3
Government 231 .....	3	Government 232 .....	3
Home Economics 231 .....	3	Home Economics 232 .....	3
Economics 231 .....	3	Economics 232 .....	3
*Elective .....	3	*Elective .....	3
Physical Education .....	1	Physical Education .....	1
	16		16

## COURSE DESCRIPTIONS

### 131. Dress Design and Tailoring. (2-3). Credit 3.

Principles of dressmaking and basic tailoring applied to a wool coat or suit. Designing original blouses and dresses. (100102)

### 132. Food Preparation and Nutrition. (2-3). Credit 3.

Students learn to plan, prepare, and serve attractive, nutritious meals for the individual and family groups. A study of the factors related to food selection and preparation, such as cost, availability, time required for preparation, and nutritional value. Laboratory experiences provide opportunities for the students to learn how to operate modern household appliances used in the preparation of food. (100201)

\*Student should check senior college catalogue for recommended elective.

**133. Advanced Dress Design and Construction. (2-3). Credit 3.**

Survey of history of costume; advanced problems in clothing construction, including draping; application of design principles to costume planning and selection. (100105)

**134. Fundamentals of Food Preparation and Service. (2-3). Credit 3.**

Principles underlying the cooking of various foods for family meals. Laboratory experiences in techniques for applying these principles in fitting foods into meal patterns. (100202)

**231. Clothing Design and Construction. (2-3). Credit 3.**

A study of fitting and special fitting problems. Dress design as applied to clothing through pattern designing. (100104)

**232. Textiles. (2-3) Credit 3.**

Fundamental facts concerning fibers. Fabric construction and finishes as applied to the selection of fabrics for clothing and the home. (100103)

**233. Home Furnishing. (2-3) Credit 3.**

Designed to give the student a background of what to look for and plan for in the new or remodeled house. Also to acquaint the student with basic needs in the home furnishings and with solutions to problems of interior decorating, and upholstering; and/or making of accessories, slip-covers, and window treatments. (100303)

**234. Home Nursing. (2-3). Credit 3.**

A course planned to give the student an opportunity to qualify for the Red Cross Certificate in Home Nursing. For majors in home economics. (100403)

## MATHEMATICS DEPARTMENT

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Math 134.....	3	Math 232.....	3
Math 231.....	3	*Science or	
*Science or		Foreign Language .....	4
Foreign Language.....	4	*Elective .....	3
English 131 .....	3	English 132 .....	3
History 131.....	3	History 132.....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111.....	1		
	18		17

\*Consult senior college catalogue for required or recommended course.



## Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
*Math 233 .....	3	*Math 234 .....	3
English 231 .....	3	English 232 .....	3
Government 231 .....	3	Government 232 .....	3
Physics 241 .....	4	Physics 242 .....	4
*Elective .....	3	*Elective .....	3
Physical Education .....	1	Physical Education .....	1
	<hr/> 17		<hr/> 17

This curriculum in mathematics pre-supposes a strong mathematical background acquired at the high school level. Students without a strong background in mathematics should enroll for Mathematics 132 and Mathematics 133 before taking Mathematics 134. Permission to pursue the curriculum as shown above must be obtained from the Chairman of the Department of Mathematics.

## COURSE DESCRIPTIONS

**131. Survey of Fundamentals of Mathematics. (3-0). Credit 3.**

Designed for students desiring a review of fundamental operations in mathematics but not expecting to take higher mathematics. This course may not be used as a part of the requirements for a major in mathematics. Review of basic arithmetic, algebra, trigonometry, and logarithms. (140101)

**131. College Algebra. (3-0). Credit 3.**

An axiomatic development of the fundamental principles of algebra. Includes a brief review of intermediate algebra; variation; set theory; systems of equations; determinants; binomial theorem; theory of equations; exponential and logarithmic functions; inequalities; progressions; probability. Suggested prerequisite: 2 years of high school algebra successfully completed or Math 130. (140201) (No credit for mathematics and engineering majors.)

**132. College Algebra. (3-0). Credit 3.**

Designed for mathematics, science, and engineering majors. Applications of the scientific and physical nature. The real number system as a field; variation; quadratic equations; systems of equations; theory of equations; determinants; introduction to matrices; probability; progressions; exponential and logarithmic functions; mathematical induction; binomial theorem. Prerequisite: 2 years of high school algebra successfully completed. (140607)

**133. Trigonometry. (3-0). Credit 3.**

Trigonometric functions and formulae theory; use of trigonometric tables; identities; solution of right and oblique triangles; inverse trigonometric functions; complex numbers. Prerequisite: 2 years of high school algebra. (140106)

**134. Analytic Geometry. (3-0). Credit 3.**

Introductory concepts; the straight line; the circle; conic sections; transformation of coordinates; polar coordinates; parametric equations. Prerequisite: Math 132, 133, or consent of Department Chairman. (140204)

**135. Finite Mathematics. (3-0). Credit 3.**

Symbolic logic; theory of sets; probability and statistics; mathematical induction. Prerequisite: Math 131 or equivalent. (140502)

**136. Statistics. (3-0). Credit 3.**

Collection and tabulation of data; bar charts; graphs; sampling; averages; dispersion; correlation; index numbers; normal curve; probability; applications to various fields. Prerequisite: Math 131 or equivalent. (140501)

**231. Differential Calculus. (3-0). Credit 3.**

A first course in differential calculus. Prerequisite: Math 134 or concurrent enrollment in Math 134. (140301)

**232. Integral Calculus. (3-0). Credit 3.**

A first course in integral calculus. Prerequisite: Math 231. (140301)

**233. Advanced Calculus. (3-0). Credit 3.**

A further study of limits and functions; sequences and series; elementary differential equations; partial derivatives; multiple integrals; surface integrals; derivatives of a vector. Prerequisite: Math 232. (140302)

**234. Differential Equations. (3-0). Credit 3.**

Fourier series, linear equations, solution by Laplace transforms and by series, application. Prerequisite: Math 233. (140402)

**131T. Basic Technical Mathematics. (3-0). Credit 3.**

The slide rule, products and factors, algebraic fractions, fractional equations, simultaneous equations, exponents and radicals, the operator J, quadratic equations. (190105)

**132T. Advanced Technical Mathematics. (3-0). Credit 3.**

Logarithms, angles, trigonometric functions, solution of right triangles, plane vectors, and vector algebra. (190107)

\*\*Business mathematics courses are described under Business Administration.

## MUSIC DEPARTMENT

### Suggested Curriculum for Music Majors

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
History 131 .....	3	History 132 .....	3
*Music Fundamentals 131 .....	3	Elementary Theory 132 .....	3
**Applied Music .....	1-2	**Applied Music .....	1-2
Choir 111 or Band 113 .....	1	Choir 112 or Band 114 .....	1
Foreign Language 141 .....	4	Foreign Language 142 .....	4
Psychology 111 .....	1	Physical Education .....	1
Physical Education .....	1		
	17-18		16-17

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231 .....	3	English 232 .....	3
Government 231 .....	3	Government 232 .....	3
*Music Literature 231 .....	3	*Music Literature 232 .....	3
**Applied Music .....	2-3	**Applied Music .....	2-3
Intermediate Theory 241 .....	4	Advanced Theory 242 .....	4
Choir 211 or Band 213 .....	1	Choir 212 or Band 214 .....	1
Physical Education .....	1	Physical Education .....	1
	17-18		17-18

### COURSE DESCRIPTIONS

#### 111, 112, 211, 212. Concert Choir. (1-2). Credit 4.

Designed to acquaint the student with the best in the classical and modern choral literature. Preparation for on-campus and public performances. (150403)

#### 113, 114, 213, 214. Concert Band. (1-3). Credit 4.

A study of the band and orchestra concert music literature for solo instrument with orchestra accompaniment, quartets, and small ensembles and full band or orchestra conducting techniques and band organization. Preparation for on-campus and public performances. (150401)

\*Elementary Education majors may fulfill their music requirements by electing Music 131-132 and Piano.

\*\*Elementary Education majors and music majors having no previous instruction in applied music should select applied music courses numbered 111-112 for the freshman year for piano, voice, or instrument.

**131. Music Fundamentals. (3-1). Credit 3.**

An introduction to the elements of music including study of the staff, clefs, key signatures, scales, time signatures, notation, meter, and rhythm based on relative solmization. (150102)

**132. Elementary Theory. (3-1). Credit 3.**

A continuation of Music Fundamentals 131, with practices in sight singing, major and minor chords, cadences, and application of theory at the keyboard; advanced rhythm, melodic and harmonic ear training. (moveable Doh) (150106)

**231. Music Literature. (3-1). Credit 3.**

A survey of the principle forms, periods, and composers of music; music literature of each of the historical periods in music; the development of instruments from the primitive to modern. (15th Century through the 19th Century.) (150104)

**232. Music Literature. (3-1). Credit 3.**

A continuation of Music Literature 231 with an in-depth study of music in the periods of the late 19th and 20th Century; the concurrent symphonic and concert music literature of today, voice, choral, and instrumental organizations. (150104)

**241. Intermediate Theory. (3-2). Credit 4.**

Aural study of superimposition, compound intervals, melodic and harmonic modulation, and all diatonic seventh chords. Singing modulations to closely related keys. Singing modal melodies and remote modulations. Aural study of unusual and mixed meters, altered chords and introduction to music form and analysis. (150106)

**242. Advanced Theory. (3-2). Credit 4.**

Part writing of figured bass exercises and melody harmonizations requiring all diatonic seventh chords and modulation; styles of writing other than the chorals style. Composition in two- and three-part song forms. Keyboard study of harmonic progression and melody harmonizations requiring all diatonic seventh chords; modulation to all related keys. (150108)

## **MUSIC EDUCATION**

**233. Public School Music Methods and Materials. (3-0). Credit 3.**

Techniques and materials for music instruction in kindergarten and grades one through three; includes experiences in singing, playing, listening, rote songs, rhythmic and creative activities. (150501)

**234. Public School Music Methods and Materials. (3-0).  
Credit 3.**

Techniques and materials for music instruction in grades four, five and six. Includes music reading, part-singing, listening, playing, voice-testing, rhythmic and creative activities. (150501)

**235. Teaching of Music in the Elementary School. (3-0).  
Credit 3.**

This course is designed for music students, covering the field of music teaching in the primary and intermediate grades. Singing, listening, and creative music are approached from the standpoint of the child, the teacher, and the supervisor. (150501)

**236. Teaching of Music in the Elementary School. (3-0).  
Credit 3.**

A continuation of 235 above, with emphasis on teaching music from the standpoint of the elementary school teacher. Rote songs, music reading, rhythms, part singing, listening lessons. A study is made of the child voice and materials available for use in the primary and intermediate grades. Correlation of music with the other subjects in the curriculum is emphasized. (150501)

## **APPLIED MUSIC**

### **Piano**

**111. Piano. Credit 1.**

Beginning piano for all students not having previous instruction in piano. Introduction to the keyboard, major and minor scales, arpeggios, the I-IV-V-I cadence chords in C major and the first six key signatures. Performance of two or three easy pieces taken from the classic, romantic, or contemporary piano literature, plus one selection from the Bartok "Microkosmos I" and the Bach "Little Dances". One half-hour lesson per week. (150305)

**112. Piano. Credit 1.**

A continuation of Piano 111: keyboard skills in all scales, arpeggios, chords, and cadences all key signatures. Performance of several pieces for the piano taken from the classic, romantic or contemporary piano literature, plus selections from the Bartok "Microkosmos II", Bach "Little Dances" or the Clementi "Sonatina" Op 36, No. 1 or equivalent. One half hour lesson per week. (150305)

**121. Piano. Credit 2.**

The second year beginning or advanced piano student will be

held responsible for all skill outlined in Piano 111 and 112, plus the addition of the enharmonic major and minor scales. Performance of selections from the Bach "Short Preludes and Fugues", Czerny "School of Velocity I", and pieces from the classic, romantic, and contemporary (American) piano literature. One hour lesson per week. (150305)

#### **122. Piano. Credit 2.**

A continuation of Piano 121 with an in-depth concentration on performance in preparation for presentation of the following graduation program: one Bach Prelude, one Czerny Etude, one Sonatina and two selected pieces from the general piano literature. One hour lesson per week. (150305)

#### **221. Piano. Credit 2.**

This course includes the study of the Bach Two-Part Inventions or selections from the French Suites; one movement from a Sonata by Haydn, Mozart, or Beethoven; romantic and modern compositions. All major and minor scales and arpeggios and selected Czerny studies. One hour lesson per week. (150305)

#### **222. Piano. Credit 2.**

This course includes the study of the Bach Two- and Three-Part Inventions, Suites and Partitas; one complete sonata by Mozart or Beethoven; one movement from a concerto by Mozart, Beethoven or Mendelssohn; Romantic and Modern compositions of similar difficulty. All major and minor scales in octaves, 3rds, 6ths and triad, dominant and diminished 7th arpeggios. One hour lesson per week. (150305)

#### **231. Advanced Piano. Credit 3.**

This course includes the study of the Bach Two- and Three-Part Inventions, studies from Czerny Op 299 or 740, one complete sonata by Mozart, Haydn, or Beethoven, other romantic and modern compositions of similar difficulty, all major and minor scales, triad, dominant and diminished 7th arpeggios. Two hour lessons per week. (150305)

#### **232. Advanced Piano. Credit 3.**

This course includes the study of Preludes and Fugues from the Well-Tempered Clavichord by Bach; one complete sonata by Mozart or Beethoven and one complete concerto; Chopin Etudes and their romantic and modern compositions of similar difficulty; major and minor scales and arpeggios. Two hour lessons per week. (150305)

## Voice

### 111. Voice. Credit 1.

This is a course in which the beginning voice student is trained in the fundamentals of voice culture. In addition, he is given instruction in correct posture, breathing, diction, vowel purity, tone production, and placement. He will learn simple songs in English. One half-hour lesson per week. (150306)

### 112. Voice. Credit 1.

A continuation of Voice 111 for the beginning voice student. The literature for voice will be extended to include the Art Song in English and songs in the Italian, French, German, and Spanish languages. One half hour lesson per week. (150306)

### 221. Voice. Credit 2.

This course includes advanced training in the fundamentals of voice culture. Added instruction is given in correct posture, breathing, diction, vowel purity, tone production, and placement. (150306)

### 222. Voice. Credit 2.

This course stresses the development of proper habits of voice study, with emphasis upon procedure and organization of the study and practice of vocalization and song literature, including early English, Italian, French, and German art songs. One hour lesson per week. (150306)

### 231. Advanced Voice. Credit 3.

This course is a more detailed, systematic review of the fundamentals of vocal production. It includes a careful study of tone placement and color, phrasing, style, and interpretation. There is a stronger emphasis on the study and correction of vocal problems through the continued development of repertoire. Two hour lessons per week. (150306)

### 232. Advanced Voice. Credit 3.

This course includes intensive work for the further development of good tone, pitch consciousness, and good diction. It includes a summary of all previous technical exercises and the study of more difficult songs from the classic, romantic, and modern writers of Italian, French, and German. Two hour lessons per week. (150306)

## Instruments

### 111. Private Instrument. Credit 1.

This course includes the fundamentals of a set instrument such as embouchure, breathing, tone production, and fingering. One half-hour lesson per week. (150304)



**112. Private Instrument. Credit 1.**

This is an introduction to the problems of instrument playing. The student learns simple solos. There is some study of scales and arpeggios. One half-hour lesson per week. (150304)

**221. Private Instrument. Credit 2.**

This is a review of the fundamentals of instrument playing. It includes more advanced studies of scales, arpeggios and solos. Participation in band and/or orchestra. One hour lesson per week. (150304)

**222. Private Instrument. Credit 2.**

This includes more advanced solos, studies, etudes, in addition to review of basic materials of previous grades. Participation in band and/or orchestra. One hour lesson per week. (150304)

**231. Advanced Private Instrument. Credit 3.**

This includes advanced solo studies. Participation in band and/or orchestra. Two hour lessons per week. (150304)

**232. Advanced Private Instrument. Credit 3.**

In-depth study of instrument literature, the art of solo performance and preparation for graduation recital. Participation in band and/or orchestra. Two hour lessons per week. (150304)

## PHYSICAL AND HEALTH EDUCATION DEPARTMENT

Four semesters of Physical Education activity courses are required in most programs for graduation from Central Texas College. Most senior colleges also have this requirement. The same activity may not be taken more than twice.

### Suggested Curriculum for Physical and Health Education Majors

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
History 131 .....	3	History 132 .....	3
Biology 141 .....	4	Biology 142 .....	4
Approved Math .....	3	Approved Math .....	3
Physical Education 131 .....	3	Physical Education 132 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	18		17

**Sophomore Year**

<b>First Semester</b>		<b>Second Semester</b>	
<b>Subject</b>	<b>Hours</b>	<b>Subject</b>	<b>Hours</b>
English 231 .....	3	English 232 .....	3
Government 231 .....	3	Government 232 .....	3
Psychology 231 .....	3	Sociology 231 .....	3
Physical Education 231 .....	3	Physical Education 235 .....	3
Elective .....	3	Elective .....	3
Physical Education .....	1	Physical Education .....	1
	<hr/> 16		<hr/> 16

**COURSE DESCRIPTIONS**

<b>Course No.</b>	<b>Title of Course</b>
PE 110	Football and Basketball (090301)
PE 111	Volleyball and Softball (090301)
PE 112	Archery and Badminton (090301)
PE 113	Beginning Bowling (090301)
PE 114	Folk Dance (090306)
PE 115	Ballroom Dance (090306)
PE 116	Beginning Swimming (090305)
PE 117	Beginning Tennis (090301)
PE 118	Beginning Golf (090301)
PE 119	Basketball and Soccer (090301)
PE 210	Advanced Bowling (090302)
PE 211	Advanced Swimming (090305)
PE 212	Advanced Tennis (090302)
PE 213	Advanced Golf (090302)
PE 214	Tumbling (090302)
PE 215	Figure Development (090307)
PE 216	Advanced Badminton (090302)
PE 217	Modern Dance (090306)
PE 218	Men's Physical Conditioning (090307)
PE 219	Varsity Athletics (090305)

**131. Foundations of Physical Education. (3-0). Credit 3.**

A course designed to orient the student in the field of health, physical education, and recreation through presentation of the scope and organization of professional activities, vocational opportunities offered in the field, and essential qualifications of members of the profession. (090101)

**132. Personal Hygiene. (3-0). Credit 3.**

A fundamental course in principles and problems of healthful living as they apply today. (090201)

**231. Community Health. (3-0). Credit 3.**

The principles of personal health—nutrition, mental health, stimulants and narcotics, exercise, sleep and rest. Also, community health—sanitation, community service, public health agencies. (090202)

**232. Kinesiology. (3-0). Credit 3.**

This is a scientific course designed to provide a technical knowledge of human anatomy and motor movements, body mechanics and recognition of deviation from normal body alignments in individuals. (090206)

**235. Safety and First Aid. (3-0). Credit 3.**

Health knowledge and practice in 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. (090203)

## SCIENCE DEPARTMENT

### Suggested Curriculum for Biology Majors

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Biology 141.....	4	Biology 142.....	4
Chemistry 141.....	4	Chemistry 142.....	4
History 131.....	3	History 132.....	3
English 131.....	3	English 132.....	3
Mathematics 133.....	3	Mathematics 134.....	3
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		
	<u>19</u>		<u>18</u>

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Biology 241.....	4	Biology 242.....	4
Chemistry 241.....	4	Chemistry 242.....	4
Government 231.....	3	Government 232.....	3
English 231.....	3	English 232.....	3
*Elective.....	3	*Elective.....	3
Physical Education.....	1	Physical Education.....	1
	<u>18</u>		<u>18</u>

### BIOLOGY COURSE DESCRIPTIONS

**141. General Zoology. (3-3). Credit 4.**

Fundamental principles of living animals with emphasis upon man; includes structure, physiology, taxonomy, development,

\*Many senior institutions require 2 semesters of Physics.

heredity, and natural history of animals; laboratory includes dissection of invertebrates and vertebrates. (160101)

**142. General Botany. (3-3). Credit 4.**

Fundamental principles of plant life with emphasis upon flowering plants; course includes study of structure, taxonomy, physiology, adaptation, ecology, genetics and life histories of plants; laboratory includes study and dissection of representative plant groups. (160101)

**143. Anatomy and Physiology. (3-3). Credit 4.**

Human anatomy and physiology. Laboratory includes experiments in vertebrate physiology and the dissection of a mammal. (160104)

**144. Microbiology. (3-3). Credit 4.**

Fundamental principles of microbiology; includes study of morphology, physiology, classification and their relations of soil, food, water, disease and problems of immunity; special consideration is given to personal and community health. (160107)

**133. Taxonomy of Flowering Plants. (2-3). Credit 3.**

Fundamental training in the use of keys and in identification of flowering plants, family characteristics and relationships, and other phases of plant science. Prerequisite: Biology 142. (160114)

**241. Invertebrate Zoology. (3-3). Credit 4.**

Classification, comparison, anatomy and physiology of invertebrates; specimens from the more important invertebrate phyla studied in laboratory; field trips for collection of native invertebrates. Prerequisite: Biology 141. (160112)

**242. Vertebrate Zoology. (3-3). Credit 4.**

Structure, development, physiology and natural history of vertebrate animals; emphasis will be placed on native wildlife; field trips will be included. Prerequisite: Biology 141. (160108)

**233. Fundamental Plant Morphology. (2-3). Credit 3.**

Structural, reproductive, and taxonomic features of representatives of major plant groups, with particular attention to groups not covered in general botany. Prerequisite: Biology 142. (160102)

## Suggested Curriculum for Chemistry Majors\*

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Chemistry 141.....	4	Chemistry 142.....	4
German 141.....	4	German 142.....	4
History 131.....	3	History 132.....	3
**Mathematics 134.....	3	Mathematics 231.....	3
English 131.....	3	English 132.....	3
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		18
	19		

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Chemistry 241.....	4	Chemistry 242.....	4
Mathematics 232.....	3	Mathematics 233.....	3
Government 231.....	3	Government 232.....	3
English 231.....	3	English 232.....	3
Physics 241.....	4	Physics 242.....	4
Physical Education.....	1	Physical Education.....	1
	18		18

## CHEMISTRY COURSE DESCRIPTIONS

### 131, 132. Introductory Chemistry. (3-2). Credit 6.

An introductory course which covers general principles of chemistry, descriptions of elements and compounds, chemical laws, and applications of chemistry to modern living. Emphasis of the second semester is on the chemistry of carbon and its compounds, foods, nutrition, and biochemical activity. (160202)

### 141, 142. General Chemistry. (3-4). Credit 8.

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. Recommended: Two years of high school algebra or concurrent enrollment in Mathematics 132. (160202)

### 241, 242. Organic Chemistry. (3-4). Credit 8.

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

\*Check senior college catalogue as requirements vary.

\*\*Students deficient in mathematics must take college algebra and trigonometry as remedial courses. These courses should be taken during the summer school term prior to the freshman year.

mechanisms and chemical bonding descriptions. Absorption spectra of organic compounds are studied. Prerequisite: Chemistry 141, 142. (160203)

### Suggested Curriculum for Geology Majors\*

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Geology 141 .....	4	Geology 142 .....	4
Mathematics 132 .....	3	Mathematics 133 .....	3
History 131 .....	3	History 132 .....	3
English 131 .....	3	English 132 .....	3
Chemistry 141 .....	4	Chemistry 142 .....	4
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	<u>19</u>		<u>18</u>

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Mathematics 231 .....	3	Mathematics 232 .....	3
Chemistry 241 .....	4	Chemistry 242 .....	4
Government 231 .....	3	Government 232 .....	3
Mathematics 134 .....	3	Science Elective .....	4
English 231 .....	3	English 232 .....	3
Physical Education .....	1	Physical Education .....	1
	<u>17</u>		<u>18</u>

### GEOLOGY COURSE DESCRIPTIONS

#### 141. Physical Geology. (3-3). Credit 4.

The physical nature of the earth. The earth's position in the solar system and the galaxy and astrogeology are clarified. Geologic oceanography and the relation of geology and meteorology are stressed. The basic principles of geophysics are discussed and explained. (160501)

#### 142. Historical Geology. (3-3). Credit 4.

Principles of stratigraphy and paleontology, the physical and organic record of the earth's history, hypotheses of the earth's origin. (160505)

#### 241. Mineralogy. (3-3). Credit 4.

Geometric and chemical crystallography. Classification and methods of identification of minerals; blowpipe analysis, formation, occurrence, properties of minerals. Megascopic identification and classification of rocks. (160502)

\*Check senior college catalogue for specific courses. Variations are considerable.

**242. Invertebrate Paleontology. (3-3). Credit 4.**

The classification, morphology and identification of invertebrate fossils. Field trip required. (160504)

**EARTH AND SPACE SCIENCE COURSE DESCRIPTIONS****141, 142. Nature of the Earth and Universe. (3-2). Credit 8.**

This course deals with the nature of the earth and the universe as revealed in geology, astronomy, meteorology, and other closely related physical sciences. Stress is placed upon the appraisal by the student of the significance of these sciences to man's environment of material and energy resources in a space-age universe. (160405)

**131. Survey of Astronomy. (3-1). Credit 3.**

The main features of the known universe and the principles involved in their discovery. A non-material survey recommended for all students. (160601)

**132. Descriptive Astronomy. (3-1). Credit 3.**

A survey of facts and an introduction to important astronomical theories. The solar system, stars, nebulae, and star systems. Double stars, variable stars, and star clusters. Stellar theories. (160602)

**Suggested Curriculum for Physics Majors****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Physics 141.....	4	Physics 142.....	4
Mathematics 132.....	3	Mathematics 134.....	3
Mathematics 133.....	3	Mathematics 231.....	3
*Science.....	4	*Science.....	4
English 131.....	3	English 132.....	3
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		
	19		18

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Physics 241.....	4	Physics 242.....	4
Mathematics 232.....	3	Mathematics 233.....	3
Government 231.....	3	Government 232.....	3
History 131.....	3	History 132.....	3
*Science.....	4	*Science.....	4
Physical Education.....	1	Physical Education.....	1
	18		18

\*Check senior college catalogue for recommended course due to variations in requirements.



## PHYSICS COURSE DESCRIPTIONS

### 140. 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. (160301)

### 141. College Physics. (3-3). Credit 4.

Fundamentals of classical mechanics, heat, and sound. This course is designed primarily for students who plan to major in medicine, dentistry, veterinary medicine, architecture, pharmacy, and for all other students needing a two-semester course in physics. Prerequisite: Math 133 or registration therein. (160302)

### 142. College Physics. (3-3). Credit 4.

A continuation of Physics 141. Fundamentals of classical electricity, magnetism, light, atomic and nuclear physics. Prerequisite: Physics 141. (160302)

### 241. Engineering Physics. (3-3). Credit 4.

Mechanics, heat, wave-motion, and optics for students of engineering and physical sciences. Prerequisite: Math 231 or registration therein. (160304)

### 242. Engineering Physics. (3-3). Credit 4.

A continuation of Physics 241. Electricity, light, magnetism, sound, and modern physics. Prerequisites: Physics 241 and Math 232 or registration therein. (160305)

## SOCIAL SCIENCE DEPARTMENT

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
History 131 .....	3	History 132 .....	3
Foreign Language 141 .....	4	Foreign Language 142 .....	4
Science 141 .....	4	Science 142 .....	4
Mathematics 131 .....	3	Mathematics 133 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	19		18

## Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231 .....	3	English 232 .....	3
Government 231 .....	3	Government 232 .....	3
Foreign Language 231 .....	3	Foreign Language 232 .....	3
*Social Science .....	3	*Social Science .....	3
Elective .....	3	Elective .....	3
Physical Education .....	1	Physical Education .....	1
	<u>16</u>		<u>16</u>

## COURSE DESCRIPTIONS

## Anthropology

**231. 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. (180101)

**232. 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. (180103)

## Bible

**132. New Testament. (3-0). Credit 3.**

A foundation course in the history, literature, and teachings of the New Testament. The four Gospels and Acts will be studied in detail. (180201)

**133. Old Testament. (3-0). Credit 3.**

A foundation course in the history, literature, and teachings of the Old Testament, with principal emphasis given to study of the historical books. (180202)

**231. Life of Christ. (3-0). Credit 3.**

The life and teachings of Jesus with attention given to the economic, social, political, and religious conditions of the world of His day. (180203)

**232. Writings of Paul. (3-0). Credit 3.**

The apostle Paul's life and teachings, as revealed in the Book of Acts and the Pauline Epistles. (180204)

\*Social Science course should be related to major or minor if possible.

**233. Acts of the Apostles. (3-0). Credit 3.**

A study of the expansion of Christian beliefs, practices, and fellowships from Palestine to outlying parts of the Roman Empire; a personality study of Peter, John, Paul, and other apostles. (180205)

**234. The Prophets. (3-0). Credit 3.**

The Hebrew prophets, their place in history, and their message. (180206)

**Geography****231. Elements of Physical Geography. (3-0). Credit 3.**

The basic physical elements of geography; maps, landforms, climate, natural resources. (180401)

**232. Geography of World Cultures. (3-0). Credit 3.**

The temporal and spatial geography of world cultures. Foundation of world cultures. (180401)

**Government****231, 232. State and Federal Government. (3-0). Credit 6.**

Fulfills the legislative requirement of 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. (180501)

**History****131. History of the United States to 1877. (3-0). Credit 3.**

English colonization; the Revolution; adaptation of the Constitution; growth of nationalism; cotton and the slavery problem; war for Southern independence. Reconstruction. (180604)

**132. 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. (180604)

**133, 134. History of Europe. (3-0). Credit 6.**

A survey of the development of European civilization from the decline of the Roman Empire to the Renaissance. 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 history of western Europe from the Renaissance to the present. The Age of Reason and the French Revolution, the Napoleonic Wars, the growth of nationalism and democracy in the nineteenth century, the causes and consequences of the two world wars and the rise of dictatorship. (180603)

**135, 136. History of England. (3-0). Credit 6.**

British, Saxon, and Norman origins; national development. struggles between church and state; crown and nobles; nobles and commons; development of parliament. (180605)

### **Philosophy**

**231. 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. (180701)

**232. 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. (180702)

**233. Logic. (3-0). Credit 3.**

Nature and methods of correct reasoning, deductive proof; inductive proof; fallacies; arguments. (180704)

**234. Comparative World Religions. (3-0). Credit 3.**

A survey course dealing with the origins, tenets, and development of the major world religions. Deductive method used to understand religion as a phenomenon in man's life. Discussion of Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. (180212)

### **Psychology**

**111. Psychology of Personal and Social Development. (1-0). Credit 1.**

Designed to orient the student to college life and to help him to understand his personal problems, such as separation from family, study habits, use of time, vocational choices. (050101)

**231. 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. (180801)

**232. Personality Adjustment. (3-0). Credit 3.**

A study of psychological concepts and principles related to healthy personality and social adjustment. Prerequisite: Psychology 231. (180803)

**233. Child Growth and Development. (3-3). 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 the human organism as it develops physically, mentally, emotionally, and socially, as well as problems of adjustment. (050105)

**234. Industrial Psychology. (3-0). Credit 3.**

The psychological factors operating in business and industry. Employment procedures, personnel testing, attitude analysis, motivation, morals, advertising, and consumer market opinion and motivation research. (180807)

### **Sociology**

**231. 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. (180901)

**232. Contemporary Social Problems. (3-0). Credit 3.**

Identification and analysis of contemporary social problems, development of criteria for evaluating programs for social betterment. (180902)

**233. Criminology. (3-0). Credit 3.**

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. (180811)

**234. Social Institutions and Processes. (3-0). Credit 3.**

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. (180904)

**235. Social Psychology. (3-0). Credit 3.**

The origin and development of personal behavior in interpersonal situations. (180808)

## PRE-PROFESSIONAL PROGRAMS

### PRE-MEDICAL      PRE-DENTAL\*

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
Biology 141 .....	4	Biology 142 .....	4
Chemistry 141 .....	4	Chemistry 142 .....	4
History 131 .....	3	History 132 .....	3
Mathematics 132 .....	3	Mathematics 133 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	19		18

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231 .....	3	English 232 .....	3
Biology 241 .....	4	Biology 242 .....	4
Chemistry 241 .....	4	Chemistry 242 .....	4
Government 231 .....	3	Government 232 .....	3
Physics 141 .....	4	Physics 142 .....	4
Physical Education .....	1	Physical Education .....	1
	19		19

### PRE-LAW\*\*

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
Mathematics 131 .....	3	Mathematics 133 .....	3
Foreign Language 141 .....	4	Foreign Language 142 .....	4
Science 141 .....	4	Science 142 .....	4
History 133 .....	3	History 134 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	19		18

\*Check university catalogue of specific medical or dental school since slight variations exist.

\*\*Check university catalogue of specific law school since variations exist.

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231 .....	3	English 232 .....	3
Foreign Language 231 .....	3	Foreign Language 232 .....	3
Science 241 .....	4	Science 242 .....	4
Government 231 .....	3	Government 232 .....	3
History 131 .....	3	History 132 .....	3
Physical Education .....	1	Physical Education .....	1
	<u>17</u>		<u>17</u>

**PRE-VETERINARY****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
Biology 141 .....	4	Biology 142 .....	4
Chemistry 141 .....	4	Chemistry 142 .....	4
Mathematics 132 .....	3	Mathematics 133 .....	3
History 131 .....	3	History 132 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	<u>19</u>		<u>18</u>

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 231 .....	3	English 232 .....	3
Biology 241 .....	4	Biology 242 .....	4
Chemistry 241 .....	4	Chemistry 242 .....	4
Physics 141 .....	4	Physics 142 .....	4
Government 231 .....	3	Government 232 .....	3
Physical Education .....	1	Physical Education .....	1
	<u>19</u>		<u>19</u>

**PRE-NURSING\*****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
English 131 .....	3	English 132 .....	3
Biology 141 .....	4	Biology 142 .....	4
Chemistry 141 .....	4	Chemistry 142 .....	4
Sociology 231 .....	3	Psychology 231 .....	3
Psychology 111 .....	1	Microbiology 132 .....	3
Physical Education .....	1	Physical Education .....	1
	<u>16</u>		<u>18</u>

\*For a four-year nursing program see the senior college catalogue of your choice.

## DIVISION OF ENGINEERING ARTS AND TECHNOLOGY

In today's expanding world, industry is in great need of personnel qualified to fill positions in both the technological and vocational fields. Central Texas College, realizing the needs of the present and ever expanding future of industry, incorporated the Division of Engineering Arts and Technology into its instructional program.

The following curricula are designed to give students the necessary knowledge and skills for entering the labor market as qualified applicants for jobs. Students who desire to do advanced study may transfer credits to colleges which offer degrees in the occupational fields of study.

Students who complete a prescribed two year curriculum in one of the programs will receive the Associate in Applied Science Degree, and students who complete less than a two-year program will receive a Certificate of Completion.

### AIRLINE STEWARDESS PROGRAM

This curriculum gives the student preparation for a career with the airlines as a stewardess, secretary, reservations clerk, and other related positions. The curriculum is not designed to develop a finished product because each company has its own specific training program. The Central Texas College Airline Stewardess Curriculum is designed to provide students with general knowledge and competence which will give them a competitive advantage and enhance their chances of employment. Any student who desires to be a stewardess must meet the specific requirements of the company.

#### Curriculum

##### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Business English 137 .....	3	Business English 138 .....	3
Aircraft Science 131 .....	3	In-Flight Service 131 .....	3
Spanish 141 .....	4	Meteorology 232 .....	3
Psychology 231 .....	3	Spanish 142 .....	4
*Typewriting .....	3	*Typewriting .....	3
Figure Development 215 .....	1	Physical Education 112 .....	1
Psychology 111 .....	1		
	18		17



**Sophomore Year**

<b>First Semester</b>		<b>Second Semester</b>	
<b>Subject</b>	<b>Hours</b>	<b>Subject</b>	<b>Hours</b>
Aerodynamics 231 .....	3	Air Transportation 233.....	3
Geography 231 .....	3	Geography 232 .....	3
*Shorthand .....	3	*Shorthand .....	3
Food Preparation & Serving 131 .....	3	Safety & First Aid 235 .....	3
Spanish 231 .....	3	Spanish 232 .....	3
Physical Education .....	1	Physical Education .....	1
	<u>16</u>		<u>16</u>

**COURSE DESCRIPTIONS****131. 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. (190201)

**131. In-Flight Service. (3-0). Credit 3.**

A general introductory course to the in-flight services provided by major airlines. The course will include such matters as reservations and ticketing, flight schedules, food service, and passenger comfort.

**231. 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. (190207)

**232. Meteorology. (3-0). Credit 3.**

This course aims to present concisely and systematically the science of meteorology in its present state of development. The primary purpose is to set forth the facts and principles concerning the behavior and responses of the atmosphere. (190210)

**233. Air Transportation. (3-0). Credit 3.**

The development and present status of air transportation, federal legislation, characteristics and classification of air carriers; the organization and functions of the Federal Aviation Agency and the Civil Aeronautics Board is reviewed. Prerequisite: None.

\*Appropriate level of typing and shorthand courses will be determined by the instructor.

## AIR CONDITIONING DEPARTMENT

Curriculum			
First Semester		Second Semester	
Subject	Hours	Subject	Hours
Survey of Air Conditioning 141 .....	4	Central Systems Air	
Advanced Air Conditioning 142 .....	4	Conditioning 143 .....	4
Basic Electricity 141 .....	4	Control Theory and	
Beginning Welding 141 .....	4	Applications 144 .....	4
Physical Education .....	1	Commercial Air	
Psychology 111 .....	1	Conditioning 145 .....	4
	18	Basic Electronics 142 .....	4
		Physical Education .....	1
			17

### COURSE DESCRIPTIONS

#### 141. Survey of Air Conditioning. (2-4). Credit 4.

Basic principles of refrigeration and heating; controls, pressures, tools and testing devices, electricity, and general applications. (190301)

#### 142. Advanced Air Conditioning. (2-4). Credit 4.

Summer-winter air conditioning. Psychrometric properties of air, air distribution, heat load calculations, selection and placement of equipment for residential and small commercial applications. (190302)

#### 143. Central System Air Conditioning. (2-4). Credit 4.

Advanced psychrometrics, air handling, component selection for the larger field-assembled systems. Capacity balance and control problems. Integrated experiments in instrumentation and cooling capacities. (190303)

#### 144. Control Theory and Applications. (2-4). Credit 4.

Application of controls and control circuitry related to refrigeration and air conditioning. Circuit design in electric, electronic, and pneumatic systems. (190304)

#### 145. Residential and Commercial Air Conditioning. (2-4). Credit 4.

Equipment selection and system design for warm air, hot water, and steam heating. Direct expansion and chilled water cooling for separate or integrated systems. Related experiments. (190305)

## AUTOMOTIVE DEPARTMENT

### Automotive Service and Repair

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Automotive Engines 141 .....	4	Engine Diagnosis 143.....	4
Auto Electrical Systems 142 .....	4	Brakes and Suspension 133.....	3
Carburetion and Lubrication 131.....	3	Power Transmission 161.....	6
Automotive Accessories 132.....	3	Welding 141.....	4
Machine Shop 143 .....	4		17
Psychology 111.....	1		
	19		

#### Summer Session

Subject	Hours
Auto Air Conditioning 162 .....	6
Auto Shop Service 163 .....	6
Field Project 151 .....	5
	17

### Automotive Service and Management

Freshman Year			
First Semester		Second Semester	
Subject	Hours	Subject	Hours
Automotive Engines 141 .....	4	Engine Diagnosis 143.....	4
Auto Electrical Systems 142 .....	4	Brakes and Suspension 133.....	3
Carburetion and Lubrication 131.....	3	Power Transmission 161.....	6
Automotive Accessories 132 .....	3	Welding 131.....	3
Machine Shop 141 .....	4		16
Psychology 111.....	1		
	19		

#### Summer Session

Subject	Hours
Auto Air Conditioning 162 .....	6
Auto Shop Service 163 .....	6
Field Project 151 .....	5
	17

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Business English 137 .....	3	Business Correspondence 138.....	3
Bookkeeping 234 .....	3	Bookkeeping 235 .....	3
Business Math 133 .....	3	Supervision 131.....	3
Economics 231.....	3	Marketing and Sales 231.....	3
Field Project 251 .....	5	Field Project 252 .....	5
	17		17

## COURSE DESCRIPTIONS

### **131. Carburetion and Lubrication. (2-4). Credit 3.**

A course designed to provide an understanding of the various fuels and lubricants used in the operation of an automotive vehicle; the theory and fundamentals of operation and the construction of the various types of carburetors, using established procedures, measuring tools, hand tools, and special equipment; the testing and adjusting of overhauled carburetors using test stand engines and gasolines of various ratings with appropriate testing equipment. The necessary mathematics, physics, and chemistry will be taught within the course content. (190702)

### **132. Automotive Accessories. (1-4). Credit 3.**

A course designed to provide an understanding of the operation and service application of power operated automotive accessories not included in other areas of this curriculum, such as seats, windows, tops, decks, headlights, door locks, antennas, windshield washers and wipers, sending units and gages, signaling and warning devices, and speed controls, using testing equipment as necessary in accordance with established procedures when trouble-shooting.

### **133. Brakes and Suspension. (1-5). Credit 3.**

A course designed to provide an understanding of the nomenclature, theory of operation, and service procedure, on passenger cars and light trucks, of the suspension systems, brakes and brake systems, wheels and tires, steering gears and related components. The use of the brake drum and disc lathe, the front-end aligning unit, and other equipment necessary to effect repairs, will be taught by demonstration and student participation. The necessary mathematics and physics will be taught within the course content.

### **141. Automotive Engines. (2-5). Credit 4.**

A course designed to provide an understanding of the gasoline fueled, internal combustion engine with emphasis on the operation, maintenance, and overhaul of the power plant and its component parts and systems. The proper use of measuring tools, hand tools, and other equipment necessary to effect either repairs to or the rebuilding of the engine with established procedures, using appropriate testing equipment, to acquire a proficiency in trouble-shooting the engine. The necessary mathematics and physics will be taught within the course content. (190701)

### **142. Auto Electrical Systems. (2-5). Credit 4.**

A course designed to provide an understanding of A.C. and D.C. power generation and rectification based on electrical funda-

mentals and practical application; acquire an understanding of the component parts of the ignition, starting, and charging circuits and their function within the circuit; acquire a knowledge of and an ability to read chassis and body wiring diagrams as they apply to diagnosis; acquire proficiency in trouble-shooting and using testing equipment in accordance with established procedures. The necessary mathematics and physics will be taught within the course content.

**143. Engine Diagnosis. (2-5). Credit 4.**

A course designed to provide an understanding of diagnosis and tune-up procedures and the use of testing equipment as they pertain to the function and control of the engine, with emphasis on the fuel, ignition, starting, and charging systems. The use of testing equipment will be taught by demonstration and student participation. (190708)

**151. Field Project. (2-8). Credit 5.**

A course designed to provide the student with up-to-date information about the service station and automotive service and repair industry through lectures by and discussions with persons from that industry and by on-the-job training in an automotive service center, and/or a service station.

**161. Power Transmission. (2-10). Credit 6.**

A course designed to provide an understanding of the function, construction, operation, maintenance, and servicing techniques of driveline units such as the clutch assembly, standard transmissions, automatic transmissions, propeller shaft and joints, final drives and differentials, by lecture, demonstration, and student participation. Disassembly and assembly of the components will be done in accordance with standard procedures, using measuring tools, hand tools, special tools, and testing equipment. The fundamentals of hydraulics and gearing will be introduced. The necessary mathematics and physics will be taught within the course content. (190703)

**162. Auto Air Conditioning. (2-8). Credit 6.**

A course designed to provide classroom laboratory, and practical experiences in the principles, design, construction, installation, removal, temperature control, air distribution, and trouble-shooting of automotive air coolers; teach safe service practices; to understand and use testing equipment in accordance with established procedures. The necessary mathematics and physics will be taught within the course content.

**163. Auto Shop Service. (2-7). Credit 6.**

A course designed to provide the student with experiences in maintenance and service jobs on live automobiles. These service operations would include all areas of repairs, lubrication, adjustments, trouble-shooting, new car delivery service, and the state safety inspection. The use of the time, rate, and parts manuals will be demonstrated to and used by the students.

**251. Field Project. (2-8). Credit 5.**

A course designed to provide the student with up-to-date information about service station and automotive service center operation and management. From lectures by and discussions with personnel from the industry and by on-the-job training, the student shall receive a firm background in management techniques and operations.

**252. Field Project. (2-8). Credit 5.**

A course designed to provide the student with up-to-date information about service station and automotive service center operation and management. From lectures by and discussions with personnel from the industry and by on-the-job training, the student shall receive a firm background in management techniques and operations.

## BUSINESS MANAGEMENT DEPARTMENT

### Office Management

#### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Introduction to Business 131.....	3	Human Relations 136.....	3
Business English 137.....	3	Business Correspondence 138.....	3
Business Math 133.....	3	Math of Finance 134.....	3
Economics 231.....	3	Economics 232.....	3
Introduction to Management 135.....	3	Approved Elective.....	3
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		
	17		16

#### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Business Law 235.....	3	Labor-Management Relations 234..	3
Principles of Accounting 241.....	4	Principles of Accounting 242.....	4
Marketing and Sales 231.....	3	Personnel Management 232.....	3
Business Speech 233.....	3	Credit and Collections 230.....	3
Introduction to Computers 133.....	3	Approved Elective.....	3
Physical Education.....	1	Physical Education.....	1
	17		17

## Real Estate and Insurance Management

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Business English 137 .....	3	Business Correspondence 138 .....	3
Business Math 133 .....	3	Math of Finance 134 .....	3
Real Estate Fundamentals 138 .....	3	Real Estate Law 238 .....	3
Insurance 137 .....	3	Business Organization 132 .....	3
Introduction to Business 131 .....	3	Life Insurance 237 .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		
	17		16

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Principles of Accounting 241 .....	4	Principles of Accounting 242 .....	4
Government 231 .....	3	Government 232 .....	3
Real Estate Finance 233 .....	3	Personnel Management 232 .....	3
Economics 231 .....	3	Economics 232 .....	3
Introduction to Management 135 .....	3	Business Speech 233 .....	3
Physical Education .....	1	Physical Education .....	1
	17		17

## COURSE DESCRIPTIONS

### 131. Introduction to Business. (3-0). Credit 3.

Provides overall picture of business operation; includes analysis of specialized fields within business organizations; identifies role of business in modern society. (030301)

### 132. Business Organization. (3-0). Credit 3.

Authority, delegation, responsibility; functional analysis of organization and management; organization for production, distribution, and finance. Prerequisite: Introduction to Business 131 or approval of instructor. (030402)

### 133. Business Mathematics. (3-0). Credit 3.

Application of arithmetic processes to particular business problems. Percentages; discounts; prices; profit and loss; commissions, interest. (140605)

### 134. Mathematics of Finance. (3-0). Credit 3.

Simple and compound interest, annuities, amortization, sinking funds, depreciation, life insurance. (140604)

### 135. Introduction to Management. (3-0). Credit 3.

This course is designed to give the student a knowledge and understanding of management theories and functions which are essential to the person planning a career in business or industry. (030405)

**136. Human Relations. (3-0). Credit 3.**

A study of "Human Relations" as an emerging scientific discipline of study in which basic concepts and principles concerning man at work are emphasized. It is structured to explain the "whys" and "wherefores" of the behavior of industrial man. (030404)

**137. Insurance. (3-0). Credit 3.**

Introduction to theory and practice of insurance including life, fire, automobile, and personal and business risk. Prerequisite: Sophomore classification. (030305)

**138. Real Estate Fundamentals. (3-0). Credit 3.**

Basic factors and agencies in modern real estate development; historic, economic, legal, and social aspects of real estate; appraisal financing and agency management. (030309)

**139. 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. (030105)

**230. Credit and Collections. (3-1). Credit 3.**

The elements of mercantile and consumer credit; organization of a credit department; sources of credit information; collection tools and procedures. (030104)

**231. Marketing and Sales. (3-0). Credit 3.**

A study of those aspects of marketing which will achieve a conceptual understanding and serve the needs of business competence. Emphasis is placed on the economic aspect of marketing and its relationship to freedom and democracy. (030307)

**232. 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. (030404)

**233. Real Estate Finance. (3-0). Credit 3.**

This course includes the study of Federal and State practices in mortgages and Real Estate Finance, also includes a survey of Savings and Loan Associations, Commercial Banks, Life Insurance Companies and Mortgage Bankers. (030309)

**234. Labor-Management Relations. (3-0). Credit 3.**

Labor relations aspects of personnel management 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. (030405)

**235. Business Law. (3-0). Credit 3.**

Nature and scope of law; court system; law of contracts; principal and agent; business organizations, including partnerships and corporations; Texas community property laws. Prerequisite: Sophomore classification. (030304)

**236. Business Law. (3-0). Credit 3.**

Additional studies in law of business, dealing with bailments, carriers, mortgages, suretyships, negotiable instruments, banks and banking, wills and estates, sales, bankruptcy. Prerequisite: Business Law 231. (030304)

**237. Life Insurance. (3-0). Credit 3.**

Principles of life insurance; business and personal use in insurance; classification and analysis of policies; reserves and policy values; organization and administration of life insurance companies. (030306)

**238. Real Estate Law. (3-0). Credit 3.**

Contains a study of sources of real estate law, legal estates and ownership, deeds, contracts, law of agency and brokerage, escrow agreements, closing of sales, title assurance methods, mortgages, liens, leases, homesteads, wills, administration of estates, zoning and building ordinances, property taxation and other matters of law which pertain to real estate transactions. (030309)

**239. 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.

## **CAREER PILOT TECHNOLOGY DEPARTMENT**

### **Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Aircraft Science 131.....	3	Propulsion Systems 132.....	3
Air Navigation 133.....	3	Basic Flight 130.....	3
Flight Instruction 111.....	1	Meteorology 232.....	3
History 131.....	3	History 132.....	3
Approved English.....	3	Approved English.....	3
Approved Math.....	3	Physical Education.....	1
Physical Education.....	1		
Psychology 111.....	1		
	18		16

**Summer Semester**

Subject	Hours
Intermediate Flight 134 .....	3
Approved Elective .....	3
	<hr/> 6

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Aerodynamics 231 .....	3	Air Transportation 233 .....	3
Commercial Flight 234 .....	3	Aviation Radio Systems 237 .....	3
Advanced Air Navigation 230 .....	3	Instrument Flight 235 .....	3
Government 231 .....	3	Government 232 .....	3
Physics 140 .....	4	Approved Elective .....	3
Physical Education .....	1	Physical Education .....	1
	<hr/> 17		<hr/> 16

**COURSE DESCRIPTIONS****111. Flight Instruction. (.5-1). Credit 1.**

An introduction to flight through actual flying experience in modern, safe, fully equipped aircraft. A minimum of twenty-three hours of instruction is provided including twelve hours of dual flight, three hours of solo flight, and eight hours of oral instruction and briefings. The program is more than sufficient to qualify a student pilot for solo flight. Prerequisite: Class II (Commercial) FAA Physical Examination.

**130. Basic Flight. (1-3.5). Credit 3.**

Continuation of flight training for completion of the Private Pilot Certificate; it exceeds the minimum flight hours necessary to satisfy the Federal Aviation Administration requirements. A minimum of fifty-five hours of instruction is provided, including fifteen hours of dual flight, twenty-five hours solo flight, and fifteen hours of oral instruction and briefings. Prerequisite: CP-111; CP-133 or concurrent enrollment or passed the FAA Private Pilot written examination.

**131. 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. (190201)

**132. Propulsion Systems. (3-0). Credit 3.**

Aircraft engine theory and principles of operation of various types of aircraft engines: reciprocating, turboprop, turbojet, and turbopfan. Consideration is also given to thermal, mechanical and volumetric efficiencies, superchargers, engine accessories, controls and instrumentation. (190202)

**133. Air Navigation. (3-0). Credit 3.**

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, which constitutes the final examination.

**134. Intermediate Flight. (2-3). Credit 3.**

First half of two phases of flight training in preparation for the FAA Commercial Pilot Certificate. A minimum of eighty hours of instruction is provided, including fourteen hours of dual flight, thirty-six hours of solo flight and thirty hours of oral instruction and briefings.

**230. Advanced Air Navigation. (3-0). Credit 3.**

This course covers Air Traffic Control Procedures, FAA Regulations pertaining to Commercial Pilot and IFR Flight Rules, aviation weather and advanced navigational procedures. Advanced flight maneuvers, low altitude enroute charts, approach plates, VOR procedures, Instrument Landing System (ILS) and Ground Controlled approach procedures. Also, the Flight Information Manual. Prerequisite: CP-133.

**231. 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. (190207)

**232. 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. (190210)

**233. Air Transportation. (3-0). Credit 3.**

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

**234. Commercial Flight. (2-3). Credit 3.**

A continuation of 134. The second half of two phases of flight training leading to the completion of the FAA Commercial Pilot Certificate. A minimum of eighty hours of instruction is provided including fifteen hours of dual flight, forty hours of solo flight and

twenty-five hours of oral instruction and briefing. Prerequisite: CP-134 or equivalent flight experience as determined by the instructor.

**235. Instrument Flight. (1-2). Credit 3.**

The necessary instruction to qualify for the FAA Instrument Pilot Rating. A minimum of fifty hours of instruction is provided, including thirty-five hours of dual flight and fifteen hours of oral instruction and briefing. Prerequisite: CP 234 or a Commercial Pilot Certificate.

**236. Multi-Engine Flight. (1-1). 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 thirty hours of instruction is provided, including twelve hours of dual flight and eighteen hours of oral instruction and briefing. Prerequisite: CP-234 or a Commercial Pilot Certificate.

**237. Aviation Radio Systems. (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. Prerequisite: CP-230.

**238. Instructor Rating. (1-2). Credit 3.**

This flight course prepares the experienced pilot for the FAA Certified Flight Instructor Certificate for airplane. Includes twenty-five hours of dual flight and twenty-five hours of oral instruction and briefing. Prerequisite: Commercial Pilot Certificate.

**331. Air Carrier Operations. (3-0). Credit 3.**

This course is designed to expand upon the Federal Aviation Regulations relating to various specialized facets of the Aviation Industry, including airline operations, aircraft certification, airworthiness standards, and airport operations.

**332. Techniques of Instruction. (3-0). Credit 3.**

This course is designed to acquaint the student with the fundamentals of teaching and learning in an aviation orientated environment. It also introduces techniques of instruction and analysis of flight maneuvers. The theory of flight and Federal Aviation Regulations relating to the flight instructor rating are taught in this course. Prerequisite: Commercial Pilot Certificate.

**333. Air Traffic Control. (3-0). Credit 3.**

Terminal and Enroute Air Traffic Controllers Procedures. Controllers standpoint of ARTC, Departure, Arrival, RAPCON, and Airport Control Tower procedures. Air traffic separation, enroute and approach clearance criteria. Practical application of Air Traffic Control procedures by field trips and Airport Control Tower Operation.

**334. Instrument Flight Instructor. (1-1). 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 35 hours of instruction is provided, including 10 hours of dual flight and 25 hours of oral instruction and briefings. Prerequisite: Certified Flight Instructor Certificate and Instrument Rating.

**335. Airline Transport Rating. (2-1). Credit 3.**

The Airline Transport Rating is the most comprehensive rating issued by the Federal Aviation Administration. Flight and ground training to qualify for the FAA Airline Transport Rating in either single or multiengine aircraft. A minimum of 55 hours of instruction is provided which includes 25 hours of dual flight and 30 hours of oral instruction and briefings. Prerequisite: First Class FAA Medical Certificate, Age 23, 1,500 hours of approved flight time, and Instrument Rating.

# COMPUTER TECHNOLOGY DEPARTMENT

## Computer Systems Programmers

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Introduction to Computers 133.....	3	Computer Operations 122.....	2
Basic Data Processing 141.....	4	Introduction to Computer Programming 134.....	3
Approved English.....	3	Systems Analysis 135.....	3
Approved Math.....	3	Approved English.....	3
History 131.....	3	Approved Math.....	3
Physical Education.....	1	History 132.....	3
Psychology 111.....	1	Physical Education.....	1
	<u>18</u>		<u>18</u>

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Management of Computer Centers 231.....	3	Computers & Data Analysis 232....	3
Computer Languages (RPG & ALC) 233.....	3	COBOL Programming 234.....	3
Government 231.....	3	Government 232.....	3
Principles of Accounting 241.....	4	Principles of Accounting 242.....	4
Approved Elective.....	3	Approved Elective.....	3
Physical Education.....	1	Physical Education.....	1
	<u>17</u>		<u>17</u>

### Computer Operators

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Introduction to Computers 133.....	3	Introduction to Computer Programming 134.....	3
Basic Data Processing 141.....	4	Data Processing Methods 142.....	4
Bookkeeping 234.....	3	Introduction to Business 131.....	3
Business English 137.....	3	Business Math 133.....	3
Physical Education.....	1	Approved Elective.....	3
Psychology 111.....	1	Physical Education.....	1
	<u>15</u>		<u>17</u>

### Keypunch Operators

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Computer Operations 121.....	2	Computer Operations 122.....	2
Beginning Key punching 131.....	3	Key punching & Data Entry 132....	3
Introduction to Computers 133.....	3	Introduction to Business 131.....	3
Bookkeeping 234.....	3	Business Math 133.....	3
Business English 137.....	3	Physical Education.....	1
Physical Education.....	1		<u>12</u>
Psychology 111.....	1		
	<u>16</u>		

## COURSE DESCRIPTIONS

### **121. Computer Operations. (1-2). Credit 2.**

Card handling procedures for Unit Record Equipment. Machine applications in job execution. Concepts of operation for Unit Record and Computer Card Systems. (030603)

### **122. Computer Operations. (1-2). Credit 2.**

Operating procedures for 3rd generation card, disk and tape systems; concepts of operating systems. Designed to develop skills in operating machine configurations by operating experience on advanced computer systems. Prerequisite: EDP 131. (030603)

### **131. Beginning Key punching. (1-3). Credit 3.**

Elements of keypunch operation. Designed to give the typist beginning skills in keypunch operation. Recommended for all beginning keypunch operators. Drills and exercises to develop punching accuracy and speed. Prerequisite: Typing speed of 30 wpm. (030603)

### **132. Key punching & Data Entry. (1-3). Credit 3.**

Advanced keypunch and verifier operation; program card design and preparation; direct data entry techniques; drills to develop maximum efficiency and speed. Prerequisite: EDP 131. (030603)

### **133. Introduction to Computers. (3-2). Credit 3.**

An introduction to computer terminology and techniques designed for data processing majors. History of data processing; computer concepts; input/output media and devices; programming concepts and preparation; management, organization and control of computer installations; differences in computer languages. (030604)

### **134. Introduction to Computer Programming. (3-2). Credit 3.**

Designed to familiarize the student with the components of computers and to develop basic abilities needed in programming for business and scientific applications. Includes problem definition, flowcharting, block diagramming, and other basic computer techniques. Analysis and solution of practical data processing applications. Prerequisite: EDP 133. (030604)

### **135. Systems Analysis. (3-2). Credit 3.**

Elementary problems from business and science using logical and mathematical techniques particularly suited to digital com-

puter characteristics. Problems involving qualifying descriptive data, manipulation of these data, and expressing of analysis in descriptive terms. Problem statements and flowcharting methods. Prerequisite: EDP 133. (030605)

**141. Basic Data Processing. (3-3). Credit 4.**

Emphasis on acquiring skills in actual machines operations, including in-depth study of unit record machines and fundamentals of computer operations. Also included are concepts of operations of unit record and computer card systems including actual practice in panel board wiring and operation of sorter, interpreter, collator, and accounting machine. (030608)

**142. Data Processing Methods. (3-3). Credit 4.**

Emphasis on acquiring skills in the operating procedure of a computer center. Included will be the operational procedure and concepts of 3rd generation computers. Concepts and actual operations of 3rd generation computers using card, disk, and tape systems in an on-line, real-time teleprocessing system. Prerequisite: EDP 133. (030606)

**230. Programming for Business Statistics. (3-0). Credit 3.**

Computer components and languages with emphasis on FORTRAN; heuristic and algorithmic computing techniques; flowcharting; applications of measures of central tendency, variation, index numbers, curve fitting for time series; impact of computer systems on decision making. Prerequisite: Six hours of mathematics. (030606)

**231. Management of Computer Centers. (3-0). Credit 3.**

Planning, organizing and controlling data processing installations. Managerial aspects in the introduction and use of computer systems and management concepts. Prerequisite: EDP 133. (030605)

**232. Computers & Data Analysis. (3-2). Credit 3.**

Computer language in construction of algorithms using techniques particularly adaptable to digital computer characteristics. Analysis and solutions designed for system applications. Prerequisite: EDP 135. (030605)

**233. Computer Languages. (3-2). Credit 3.**

Specialized languages used in third generation computer systems. Emphasis on 360 Systems RPG and ALC languages, and file organization routines. Prerequisite: EDP 134. (030606)

**234. COBOL Programming. (3-2). Credit 3.**

Theory and operation of digital computers and programming



language and techniques particularly suitable for problems non-numeric in nature. Prerequisite: EDP 134. (030606)

**235. Advanced COBOL. (3-2). Credit 3.**

Advanced theory and operation of digital computers and programming language and techniques particularly suitable for problems non-numeric in nature. Specifically related to advanced systems concepts. Prerequisite: EDP 234. (030606)

**236. FORTRAN Programming. (3-2). Credit 3.**

Theory and operation of digital computers and languages used to control logical and mathematical activities of computers. Number theory and logical systems applicable to computer design. Algebraic language programming. FORTRAN. Prerequisite: EDP 133 and 6 hours of math. (030606)

**237. Field Project. (0-6). Credit 3.**

Problem in student's divisional major applying electronic data analysis and processing techniques. Prerequisite: 12 hours in data processing. (030605)

**238. Computer Programming Systems. (3-2). Credit 3.**

A study of input/output and storage systems, structures and transformations or data bases, and executive systems. Also included are the structures of program libraries, program intercommunication, batch processing executive systems, multi-programming executive systems, interrupt systems, and on-line, console, time sharing systems. Prerequisite: 6 semester hours in computer programming. (030606)

**239. Linear Programming. (3-2). Credit 3.**

This course is designed to give the business administrator computer methods necessary for the solution of a wide variety of practical applications. These include simultaneous equation solutions applied to various business methods, integration methods, root finding, derivatives and differential equations, and solutions of linear systems. Prerequisite: EDP 234 or 236. (030606)

**242. Assembly Language Programming. (3-3). Credit 4.**

This course is designed to give the student advanced programming concepts and computer applications programming in assembly language coding techniques, particularly suitable for problems dealing in applications of on-line, real-time systems. Prerequisite: EDP 233 or consent of instructor. (030606)

**243. Teleprocessing. (3-3). Credit 4.**

Requirements and fundamentals of a teleprocessing system's design and programming; transmission capabilities and control;

program protection and relocation; features and application of transmission devices. Prerequisite: EDP 242. (030606)

**244. Marketing Research and Computers. (3-3). Credit 4.**

Techniques of marketing research, research design, analysis and interpretation of marketing data, questionnaire building, and sampling methods. Emphasis given to selected applications of marketing research. Prerequisite: 6 semester hours in computer programming. (030606)

**245. Systems Documentation. (2-4). Credit 4.**

Analysis, evaluation, design and documentation of large scale systems characteristic of commercial, business, and scientific oriented applications. Prerequisite: EDP 138 and 15 hours of data processing.

## DRAFTING AND DESIGN TECHNOLOGY DEPARTMENT

Freshman Year			
First Semester		Second Semester	
Subject	Hours	Subject	Hours
History 131.....	3	History 132.....	3
English 131.....	3	English 132.....	3
Approved Math.....	3	Math 133.....	3
Engineering Graphics 131.....	3	Engineering Drawing 132.....	3
Art (Freehand Drawing) 131.....	3	Engineering Drawing 143.....	4
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		17
	17		

Sophomore Year			
First Semester		Second Semester	
Subject	Hours	Subject	Hours
Government 231.....	3	Government 232.....	3
Descriptive Geometry 132.....	3	Electronic Drafting 243.....	4
Architectural Drafting 242.....	4	Structural Drafting 244.....	4
Physics 140.....	4	Approved Elective.....	3
Physical Education.....	1	Physical Education.....	1
	15	Psychology 231.....	3
			18

## COURSE DESCRIPTIONS

**131. Engineering Graphics. (2-4). Credit 3.**

Freehand and instrument drawing, dimensioning, fastening, pictorial methods, charts and graphs, projection drawings, geometry of graphical construction, graphical design. Required for beginning engineering students. (060806)

**132. Engineering Drawing. (2-4). Credit 3.**

Continued training in the use of auxiliary views, sections and conventions, intersections and developments, dimensions, notes, limits, and precision; screw threads, etc. (060806)

**133. Blue Print Reading. (2-3). Credit 3.**

1315 Principles of design layout, blue print reading, elementary estimating procedures, and an investigation of the standards required in the various industries. (190807)

**143. Engineering Drawing. (3-3). Credit 4.**

Drawing and manufacturing processes; training in producing various kinds of working drawings; making charts, graphs and diagrams; commercial practices, and economies; and the use of standard parts, sizes, symbols, and abbreviations. (060805)

**147. Architectural Drafting. (3-3). 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. (190803)

**243. Electronic Drafting. (3-3). Credit 4.**

A study of layout and preparation of finished electronic and electrical drawings, stressing modern representation used for pictorial drawings, wiring and connection diagrams, printed circuits control circuits, and schematic diagrams. Stress is placed on accepted practices and symbols in Engineering Offices. Some review of lettering and mechanical drawing principles. (190806)

**244. Structural Drafting. (3-3). Credit 4.**

A study of 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. (190801)

**245. Topographical Drawing. (3-3). Credit 4.**

A study of A.R.E.A. symbols, authorized abbreviations, classifications, types of maps, scales, topographic mapping, and construction of maps, well spotting, isopach and contour maps, theory and construction of stratigraphic and construction cross section; contours and contour sketching and coloring; copy-duplicating reproduction. (190804)

# ELECTRONICS TECHNOLOGY DEPARTMENT

## Curriculum

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Math of Electronics 131.....	3	Basic Electricity 142.....	4
Basic Electronics 141.....	4	Vacuum Tubes and	
Engineering Graphics 131.....	3	Semiconductors 143.....	4
Approved English.....	3	Test Equipment 144.....	4
*Approved Elective.....	3	Approved English.....	3
Physical Education.....	1	*Approved Elective.....	3
Psychology 111.....	1	Physical Education.....	1
	18		19

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Math of Electronics 232.....	3	Advanced Electronics	
Communications Circuits 243.....	4	Circuits 245.....	4
Industrial Electronic Control		Advanced Electronics	
Circuits 231.....	3	Circuits 246.....	4
Transistor Amplifiers 244.....	4	Special Project 233.....	3
*Approved Elective.....	3	*Approved Elective.....	3
Physical Education.....	1	*Approved Elective.....	3
	18	Physical Education.....	1
			18

### Sophomore Year (Communications Option)

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Communications Circuits 243.....	4	Transistor Amplifiers 244.....	4
Radio Theory and		Advanced Radio Servicing 248.....	4
Servicing 148.....	4	Advanced Television	
Television Theory and		Servicing 249.....	4
Servicing 149.....	4	*Approved Elective.....	3
*Approved Elective.....	3	Physical Education.....	1
Physical Education.....	1		16
	16		

## COURSE DESCRIPTIONS

### 131. Math of Electronics. (3-0). Credit 3.

A comprehensive study in the solution of electronic problems through the use of the slide rule, trigonometry, and selected topics from differential and integral calculus. Prerequisite: High school algebra or equivalent. (191001)

\*Electives must be chosen from electronics or related courses approved by the program director.

**141. Basic Electronics. (3). Credit 4.**

A study of the elementary principles of electronics including DC circuits as related to series and parallel resistive, capacitive, and inductive networks, and the use of Ohm's Law, Kirchoff's Laws, and the power formulas in analyzing these networks. (190901)

**142. Basic Electricity. (3-3). Credit 4.**

A study of single and polyphase AC circuits and the use of Kirchoff's Laws as well as Thevenin's, Norton's, and Superposition Theorems in analyzing these circuits. Prerequisite: ET 141.

**143. Vacuum Tubes and Semiconductors. (3-3). Credit 4.**

A broad view of vacuum tubes, transistors, and other semiconductors, their composition, characteristics, theory of operation, and circuit applications. Prerequisite: ET 141.

**144. Test Equipment. (3-3). Credit 4.**

The use, repair, and theory of operation of all types of electronic test equipment ranging from the VOM through the Dual Beam Oscilloscope.

**148. Radio Theory and Servicing. (2-4). Credit 4.**

A study of electrical fundamentals, vacuum tube operation, and radio circuits. Proper techniques for bench servicing of electronic equipment, isolating the malfunctioning circuit, and locating defective parts. Prerequisite: ET 142, ET 143, ET 144.

**149. Television Theory and Servicing. (3-3). Credit 4.**

A study of electron tube circuits peculiar to television receivers and practical methods for trouble shooting and servicing of inherent problems. Prerequisites: ET 142, ET 143, ET 144. (191006)

**231. Industrial Electronic Control Circuits. (3-0). Credit 3.**

Theory and operation of industrial timing circuits, strain gauge systems, magnetic amplifiers, and photo-electric devices. Prerequisite: ET 143.

**232. Math of Electronics. (3-0). Credit 3.**

The application of loop and nodal equations, differential equations, Laplace transforms, and Fourier series in the solution of electronic problems. Prerequisites: ET 131, ET 141, ET 142.

**233. Special Project. Credit 3.**

Prerequisite: Special projects must be approved by instructor before registration.

**243. Communications Circuits. (3-3). Credit 4.**

Modulation and demodulation circuits and design of antennas and transmission lines. Prerequisites: ET 142, ET 143.

**244. Transistor Amplifiers. (3-3). Credit 4.**

The use of the transistor in common base, common emitter, and common collector configurations and linear amplifiers. Prerequisite: ET 143.

**245. Advanced Electronics Circuits. (3-3). Credit 4.**

The use of the transistor in oscillators and feedback amplifiers. Prerequisite: ET 143.

**246. Advanced Electronics Circuits. (3-3). Credit 4.**

The design of trigger circuits, multivibrators, binary counters, and other basic digital circuits through the use of discrete components and integrated circuits, and the logic implementation of these circuits. Prerequisite: ET 244.

**247. Electronic Trouble Shooting. (3-3). Credit 4.**

The isolation, location, and repair of all types of electronic equipment. Prerequisites: ET 142, ET 143, ET 144, ET 244.

**248. Advanced Radio Servicing. (2-4). Credit 4.**

Further study of radio and amplifier circuitry including high-fidelity and stereo components. The routine servicing of transistorized units is included. Prerequisite: ET 148. (191007)

**249. Advanced Television Servicing. (2-4). Credit 4.**

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: ET 149. (191012)

## FARM AND RANCH MANAGEMENT DEPARTMENT

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Animal Husbandry 131 .....	3	Range Management 134 .....	3
Agronomy 132 .....	3	Soil Science 135 .....	3
Wildlife Management 133 .....	3	Poultry Science 136 .....	3
Biology 141 .....	4	Biology 142 .....	4
Approved English .....	3	*Approved Elective .....	3
Physical Education .....	1	Physical Education .....	1
Psychology 111 .....	1		17
	18		

\*Elective may be chose from Introduction to Business, Management, Machine Tools, Automotive Mechanics, Drafting, or other approved by the Director.

## Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Farm Mechanics 231 .....	3	Farm Mechanics 232 .....	3
Feeds and Feeding 233 .....	3	Horticulture 235 .....	3
Entomology 234 .....	3	Livestock Marketing 236 .....	3
Economics 231 .....	3	Economics 232 .....	3
Business Math 133 .....	3	*Approved Elective .....	3
Physical Education .....	1	Physical Education .....	1
	<hr/> 16		<hr/> 16

## COURSE DESCRIPTIONS

**131. Animal Husbandry. (3-2). 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. (010401)

**132. Agronomy. (3-2). 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. (010301)

**133. 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. (011001)

**134. Range Management. (3-2). 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. (010303)

**135. Soil Science. (3-2). 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. (010201)

**136. Poultry Science. (3-2). Credit 3.**

A basic course in poultry production involving breeds, breeding, selection, feeding, care, and management. Marketing is emphasized because it is a specialized industry. (010901)

**231. Farm Mechanics. (3-3). Credit 3.**

Basic farm shop skills in tool conditions, sketching, carpentry, painting, rope work, concrete, soldering, cold metal work, basic welding. (011101)

**232. Farm Mechanics. (3-3). Credit 3.**

A second course in farm shop skills for the farm and ranch student. Repair and maintenance of farm machinery; principles of gasoline engine and diesel engine; construction of fences and feed lot equipment; oxygen and acetylene welding; farm survey drainage and earthen construction. (011102)

**233. Feeds and Feeding. (3-0). Credit 3.**

Chemical composition of feeds, nutrients, requirements of farm animals, utilization of feeds, formulating and balancing rations. (010404)

**234. Entomology. (3-2). 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. (010201)

**235. Horticulture. (3-2). Credit 3.**

Growth and structure of fruit, vegetable, and ornamental plants. Effects of environment on plant production and principles and methods of propagation. (010701)

**236. Livestock Marketing. (3-0). 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.



## LAW ENFORCEMENT TECHNOLOGY DEPARTMENT

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Police Administration 131 .....	3	Criminal Law 133 .....	3
Criminal Investigation 132 .....	3	Criminal Evidence 134 .....	3
Safety and First Aid 235 .....	3	Traffic Law and Court	
History 131 .....	3	Procedures 135 .....	3
English 131 .....	3	History 132 .....	3
Psychology 111 .....	1	English 132 .....	3
Physical Education .....	1	Physical Education .....	1
	17		16

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Administration of Law 232 .....	3	Firearms and Defensive	
Juvenile Procedures 234 .....	3	Tactics 231 .....	3
Government 231 .....	3	Law Enforcement Seminar 233 .....	3
Sociology 233 .....	3	Police Records and	
Speech 233 .....	3	Identification 235 .....	3
Physical Education .....	1	Government 232 .....	3
	16	Psychology 231 .....	3
		Physical Education .....	1
			16

## COURSE DESCRIPTIONS

### 131. Introduction to Law Enforcement. (3-0). Credit 3.

A philosophy and history of law enforcement; organization and jurisdiction of local, county, state, and federal law enforcement agencies; professional opportunities, organizations and qualifications required. Analysis of the duties and responsibilities of police administration.

### 132. 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 interrogation.

### 133. Criminal Law. (3-0). Credit 3.

A study of definitions, structure and important sections of the Penal Code and other criminal statutes and procedures. Covers laws of arrest, search, and seizure; laws of evidence, criminal procedure and Texas Penal Code.

**134. Criminal Evidence. (3-0). Credit 3.**

The types and degrees of evidence and the rules governing the admissibility of evidence into court; investigation procedures, crime scene, search and recording; collection and preservation of evidence; laboratory aids; sources of information; interviews and interrogation; follow-up and case preparation.

**135. Traffic Law and Court Procedures. (3-0). Credit 3.**

State vehicle requirements and related laws; routine traffic duties of an officer; traffic accident investigation techniques and reports; special traffic problems; the traffic court; case preparation from incident to final disposition through court.

**231. Firearms and Defensive Tactics. (2-2). Credit 3.**

The moral aspects, legal provisions, safety precautions and restrictions governing the use of firearms; firing of firearms and shotguns; protection against persons armed with dangerous and deadly weapons; demonstration and drill in a limited number of holds; restraint of prisoners and mentally ill; use of the baton; mob control.

**232. Administration of Law. (3-0). Credit 3.**

The court system; principles of constitutional, federal, state, and civil laws as they apply to and affect law enforcement. Mock investigations and procedures from incident to final court disposition. Punishment, treatment, and prevention of criminality. Sociological analysis of probation, parole, and prison administration.

**233. Law Enforcement Seminar. (1-3). Credit 3.**

*A problems course in law enforcement.*

**234. 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.

**235. Police Records and Identification. (3-0). Credit 3.**

A study of the organization and operations of different systems of records, including related complaint, arrest, identification, and administrative records.

**236. Police Administration. (3-0). Credit 3.**

The principles of police organization and administration will be discussed, and the problems of law enforcement at the administrative level. The importance of planning and operational units with *emphasis on Police Records as an administrative aid.* The orga-

nization and supervision of the patrol units with a view to improving employee morale and better public relations. Prerequisite: L. E. 131.

**331. Advanced Criminal Investigation. (3-0). Credit 3.**

An intensive survey of the problems and techniques of scientific criminal investigation with a view to assist in acquiring the skill and ability to conduct all types of major crime investigation. Vice and narcotics control will form an integral part of the course. The purpose being to provide the investigators with knowledge of how to acquire and process evidence for presentation in court. Prerequisite: L. E. 132.

**332. Police Internship I. (1-3). Credit 3.**

The internship which will be provided will give on-the-job training both in municipal police work as well as highway patrol. Critiques of field work and classroom discussion of ways to aid the new entrant in the law enforcement field. Prerequisite: Associate Degree and approval of the director.

**333. Police Internship II. (1-3). Credit 3.**

The internship which will be provided will give on-the-job training both in municipal police work as well as highway patrol. Critiques of field work and classroom discussion of ways to aid the new entrant in the law enforcement field. Prerequisite: Associate Degree and approval of the director.

**334. Traffic Administration. (3-0). Credit 3.**

The organization and administration of a traffic division in a modern law enforcement agency: the application of the three E's (Engineering, Education, and Enforcement) at the supervisory level. Discussion of related laws, routine traffic duties, and traffic accident techniques with practical application of principles of investigation. Prerequisite: L. E. 131.

**335. Penology. (3-0). Credit 3.**

Survey of the philosophy of Penal and Correctional Institutions and efforts at rehabilitation. Study of theories, practices, and criminal typologies. Problems encountered in Probation and Parole.

**336. Police Personnel Management. (3-0). Credit 3.**

Survey and application of the fundamentals of personnel management in a modern police organization. The mechanics of position classification and descriptions. How to select, screen, train, and evaluate law enforcement employees. Practical application and limitation of the objective type of testing. Merit ratings and departmental policy procedures in regard to employee representa-

tive organization. Proposals for improving working conditions and salary scales. Prerequisite: L. E. 131.

**337. Constitutional Law. (3-0). Credit 3.**

A study of the United States constitution and major court decisions, including U.S. Supreme Court decisions on constitutional questions related to the field of criminal justice.

## MACHINE TOOLS DEPARTMENT

### Curriculum

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Machine Shop Practice 143 .....	4	Machine Shop Practice 144 .....	4
Beginning Welding 141 .....	4	Advanced Welding 142 .....	4
Engineering Graphics 131 .....	3	Engineering Drawing 132 .....	3
Introduction to Business 131 .....	3	Approved Elective.....	3
Psychology 111 .....	1		14
	15		

### COURSE DESCRIPTIONS

**141. Beginning Welding. (2-4). Credit 4.**

Electric, oxy-acetylene welding and torch cutting. Making fusion welds in all positions with both the electric and oxy-acetylene welding. Using the hand cutting torch and cut-a-line cutting machine. (110407)

**142. Advanced Welding. (2-4). Credit 4.**

Electric, oxy-acetylene welding and torch cutting. Concentration on welding tests required by industry. Pipe welding. Precision torch cutting in preparing welding joints. (110407)

**143. Machine Shop Practice. (2-4). Credit 4.**

Theory and practice in basic metal working, hand and machine tool operation and maintenance. Includes related instruction in blue print reading and precision measurement. (110407)

**144. Machine Shop Practice. (2-4). Credit 4.**

Theory and practice in laying out and setting up machine tools to perform selected work. Includes related instruction in basic metallurgy. Prerequisite: MT 143. (110403)

**241. Machine Shop Practice. (2-4) Credit 4.**

Theory and practice in planning and executing machine shop production work. Includes instruction in jig and fixture design and production. (110404)

**242. Machine Shop Practice. (2-4). Credit 4.**

Theory and practice in designing and tooling for quantity production of selected unit. Includes instruction in selection of materials and fabrication methods. (110404)

## NURSING DEPARTMENT

The Associate Degree Nursing Program includes academic study in the college classroom and clinical experience in the hospital. At the completion of this program, the student is awarded an Associate in Applied Science Degree and is entitled to write the National Test Pool Examination to qualify as a Registered Nurse (R.N.).

**Admission Requirements:** The student's application for general admission to the College must be approved. In addition to the requirements for admission to the College, the following are required of the Nursing Program: 1. Physical examination report signed by a licensed physician. 2. Three character references. 3. A composite score of 15 on the ACT test. 4. Personal interview with an admission committee from the nursing faculty.

In order to maintain good standing in the Nursing Program, the student must earn a grade of "C" or better in each nursing course taken and maintain an overall grade average of "C".

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Chemistry 131 .....	3	Approved English .....	3
Anatomy and Physiology 143 .....	4	Medical-Surgical Nursing 192 .....	9
Fundamentals of Nursing 161 .....	6	Microbiology 132 .....	3
Psychology 231 .....	3		15
Psychology 111 .....	1		
	17		

### Summer Semester (6 weeks)

Subject	Hours
Sociology 231 .....	3
Approved English .....	3
	6

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Social Science .....	3	Social Science .....	3
Psychology 233 .....	3	Medical-Surgical Nursing 292 .....	9
Maternal and Child Health		Nursing Seminar 233 .....	3
Nursing 291 .....	9		15
	15		

Summer Semester (6 weeks)	
Subject	Hours
Psychiatric Nursing 264 .....	6
	<hr/> 6

## COURSE DESCRIPTIONS

### **161. Fundamentals of Nursing. (3-9). Credit 6.**

This course introduces the student to nursing. Instruction and practice in basic principles and skills are provided. Experiences in the clinical area are developed to provide intellectual and emotional maturation of the student as well as constructive learning. The student is introduced to content which will be integrated in all nursing courses; i.e., nutrition, pharmacology, pathology, rehabilitation, and prevention as well as sociological and psychological aspects. Hospitals and other agencies are used for both observation and practice. (190501)

### **192. Medical-Surgical Nursing. (4-15). Credit 9.**

This course is an introduction to basic medical and surgical nursing necessary for knowledge and skill in the care of medical-surgical patients. The nursing problems of patients with respiratory, cardio-vascular, genito-urinary diseases, congenital and hereditary diseases are considered. Prerequisite: Fundamentals of Nursing 161. (190509)

### **291. Maternal and Child Health Nursing. (4-15). Credit 9.**

The mother, child, and family are considered as a community unit in this course. Lectures and practice in the nursing care of the mother and child are provided. The nursing care of the mother during pregnancy, delivery, and post-partal periods and the infant during the neonatal period are included. Emphasis is placed on the different needs of children in illness due to the influence of developmental stages and pathological conditions. Prerequisite: Medical-Surgical Nursing 192. (190516)

### **292. Medical-Surgical Nursing. (4-15). Credit 9.**

The health problems of sensory and motor disturbances, allergic phenomena are vehicles for the continued study in medical-surgical nursing. The course is designed to increase knowledge and skills necessary for comprehensive nursing care. Prerequisite: Medical-Surgical Nursing 192. (190509)

### **233. Nursing Seminar. (2-2). Credit 3.**

This course is a seminar consisting of an exploration of nursing both past and present, including a discussion of problems, responsibilities and expectations of the graduate nurse. (190521)

**264. Psychiatric Nursing. (6-24). Credit 6.**

This course is concerned with the development of personality, the dynamics of behavior, and the maintenance of restoration of mental health. Emphasis is placed on the nurse's role in relationship with mentally ill patients, as a member of the psychiatric team, and as a member of society. (190507)

**OFFICE ADMINISTRATION DEPARTMENT****Secretarial Science Curriculum\*\*****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Clerical Practice 135.....	3	Secretarial Practice 136.....	3
*Beginning Shorthand 131.....	3	*Intermediate Shorthand 132.....	3
*Beginning Typewriting 133.....	3	*Intermediate Typewriting 134.....	3
Office Machines 139.....	3	Business Math 133.....	3
Business English 137.....	3	Business Correspondence 138.....	3
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		16
	17		

**Sophomore Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Bookkeeping 234.....	3	Bookkeeping 235.....	3
*Advanced Shorthand 231.....	3	*Advanced Transcription 233.....	3
*Advanced Typewriting 232.....	3	*Approved Elective.....	3
Introduction to Computers 133.....	3	Economics 232.....	3
Beginning Key punching 131.....	3	*Approved Elective.....	3
Physical Education.....	1	Physical Education.....	1
	16		16

**Clerical Curriculum  
(9-Months Program)**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Bookkeeping 234.....	3	Bookkeeping 235.....	3
*Typewriting.....	3	*Typewriting.....	3
Clerical Practice 135.....	3	Secretarial Practice 136.....	3
Business Math 133.....	3	Office Machines 139.....	3
Business English 137.....	3	Business Correspondence 138.....	3
Physical Education.....	1	Physical Education.....	1
Psychology 111.....	1		16
	17		

\*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 taken in a variety of accounting and electronic data processing courses in any of the Office Occupations Programs.

\*\*Students who complete only one year of the Secretarial Science Curriculum will be awarded a Certificate of Completion.

## COURSE DESCRIPTIONS

**131. Beginning Shorthand. (3-3). Credit 3.**

Introduction to Gregg simplified shorthand. Reading; writing; theory principles; brief forms. (030502)

**132. Intermediate Shorthand. (3-3). Credit 3.**

Continuation of 131. (030502)

**133. Beginning Typewriting. (3-2). Credit 3.**

A beginning course in touch typewriting for the mastery of machine parts and the keyboard. Special emphasis on speed development, including an introduction to letter writing. (030504)

**134. Intermediate Typewriting. (3-2). Credit 3.**

A continuation of Typewriting 133. Composition and typing of business letters, tabulation, typing of manuscripts. (030504)

**135. Clerical Practice. (1-2). Credit 3.**

Procedures of filing and finding operations employed in business offices, standard filing systems. Training in the operation of spirit duplicators, mimeograph, and dry copy machines. Introduction to and individual training in the operation of automatic typewriting equipment. Training in proficiency in operation of voice transcribing machines. (030506)

**136. Secretarial Practice. (1-3). Credit 3.**

Office conduct; special aids to efficiency in office routine; letter structure and other style problems; filing and finding academic and business reports; communication and transportation problems. (030506)

**137. Business English. (3-0). Credit 3.**

Fundamentals of grammar, punctuation and sentence structure as employed in written business communications. Work study; sentence analysis; punctuation; paragraphing; planning. (030509)

**138. 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. (030510)

**139. Office Machines. (3-3). Credit 3.**

Technique familiarization in the operation of the most commonly used office machines. Computation; calculations; speed drills; percentages; discounts and net values; chain discounts; business forms. (030601)



**231. Advanced Shorthand. (3-3). Credit 3.**

Improvement of ability to take dictation and transcribe mailable copy. Theory principles; brief form derivatives; vocabulary development; speed building; mailable transcription; office style dictation. (030503)

**232. Advanced Typewriting. (3-2). Credit 3.**

This course includes advanced work in such specialized production as tabulation, interoffice correspondence, manuscripts, telegrams, stencil cutting and mimeograph operation, legal forms and additional work on the arrangement of business letters. (030507)

**233. Advanced Transcription. (0-3). Credit 3.**

A continuation of skill building in Gregg Shorthand with concentration on transcribing into mailable copy of office-style dictation. Prerequisite: Advanced Shorthand 231.

**234. Bookkeeping. (3-2). Credit 3.**

Elementary principles of bookkeeping, journalization; posting, statements; special journals; subsidiary ledgers. (030201)

**235. Bookkeeping. (3-2). Credit 3.**

Analysis and recording of business transactions; use of journal and ledger; trial balance and work sheet; 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. (030201)

**236. Report Writing. (3-0). Credit 3.**

The techniques of writing technical reports and business letters. (070401)

## PHOTOGRAPHY DEPARTMENT

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Photographic Principles 141.....	4	Television Photography 241.....	4
Commercial Photography 142.....	4	Portrait Retouching 242.....	4
Portrait Photography 143.....	4	Color Photography 243.....	4
Introduction to Business 131.....	3	Bookkeeping 131.....	3
Business Elective.....	3	Business Elective.....	3
	18		18

## COURSE DESCRIPTIONS

**141. Photographic Principles. (2-4). Credit 4.**

The course includes elements of composition, negative handling, exposure, explanation, and demonstration of negative

processing; contact and projection printing; elementary study of light, cameras, lenses, filters, and other photographic equipment; and discussions and demonstration of different types of negative materials, photographic papers, and their characteristics. (191201)

**142. Commercial Photography. (2-4). Credit 4.**

The course is an advanced study of photography. Extensive practice in the use of professional cameras, enlargers, contact printers, and other photographic equipment is given. (191203)

**143. Portrait Photography. (1-5). Credit 4.**

A study is made of fundamental lighting, camera techniques, posing, composition, processing, and printing as applied to portraiture. Retouching negatives and prints, mounting prints, and making story-telling pictures for fashion and advertising are emphasized. (191205)

**241. Television Photography. (1-4). Credit 4.**

Elementary instruction and practice in movie work for television and allied fields. Laboratory work in editing, splicing continuity, and use and maintenance of the motion picture camera.

**242. Portrait Retouching. (2-4). 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. (191205)

**243. Color Photography. (2-4). Credit 4.**

Theory and practice, problems encountered in lighting, color harmony and processing. Type-C Color. Basic principles of photomicrography.

## RESTAURANT MANAGEMENT DEPARTMENT

### Freshman Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Food Preparation & Serving 131 ...	3	Work Organization 134 .....	3
Nutrition 132 .....	3	Food Purchasing 135 .....	3
Sanitation and Safety 133 .....	3	Menu Planning 136 .....	3
Business English 137 .....	3	Business Correspondence 138 .....	3
History 131 .....	3	History 132 .....	3
Psychology 111 .....	1		
	<hr/> 16		<hr/> 15

## Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Restaurant Merchandising 232.....	3	Management Practice 235 .....	3
Introduction to Business 131.....	3	Supervision 233.....	3
Business Math 133 .....	3	Bookkeeping 234 .....	3
Government 231.....	3	Government 232.....	3
Economics 231 .....	3	Economics 232 .....	3
	15		15

## COURSE DESCRIPTIONS

**131. Food Preparation & Serving. (3-3). Credit 3.**

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. (100203)

**132. Nutrition. (3-1). 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. (100201)

**133. Sanitation and Safety. (2-3). Credit 3.**

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.

**134. Work Organization. (1-3). Credit 3.**

Methods and techniques of planning and organizing work. Principles of time and motion as related to efficient use of worker and work place. Application of work simplification procedures for maximum efficiency of operation.

**135. Food Purchasing. (2-2). Credit 3.**

Applied theory of food and beverage purchasing; factors affecting selection, standards, quality, and prices; techniques of receiving, storing and issuing supplies, foods, and materials; applied theory of cost control, pricing, and portions. (100201)

**136. Menu Planning. (2-2). 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. (100204)

**232. Restaurant Merchandising. (2-3). Credit 3.**

Sales promotion; interior decor; types and uniformity of service; food and beverage display; menu and room styling. (030310)

**233. Supervision. (3-3). Credit 3.**

A course designed to provide an understanding of the complex job of leading men, planning work, and mediating between the policy-setting management on the one hand and the rank-and-file workers on the other. Emphasis is placed upon planning and formalizing courses of action for problems that face the supervisor. The decision making process will also be studied—especially the man-to-man contact and direction that eliminates production bottlenecks and makes profitable operations possible. The control functions of measuring, restraining, and changing—deciding when things are out of line and taking the necessary action to bring them back under control—are also emphasized. (030405)

**234. Marketing and Sales Promotion. (3-3). 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, product design, marketing research, and customer services are the individual ingredients of sales promotion, and each is examined in detail. Advertising is studied as the force that creates prospects for countless products, converts these prospects into customers, and keeps customers returning and buying.

**235. Management Practice. (0-10). Credit 3.**

Supervised work experience and practical application of management techniques.

**TELECOMMUNICATIONS TECHNOLOGY DEPARTMENT****Freshman Year**

First Semester		Second Semester	
Subject	Hours	Subject	Hours
Radio & TV Announcing 131 .....	3	Station Management 133.....	3
Broadcast Technology 132 .....	3	Radio Programming 134.....	3
Journalism 131 .....	3	*Broadcast Electronics 135 .....	3
English 131 .....	3	English 132 .....	3
History 131.....	3	History 132.....	3
Psychology 111.....	1	Physical Education .....	1
Physical Education .....	1		
	17		16

### Sophomore Year

First Semester		Second Semester	
Subject	Hours	Subject	Hours
*Broadcast Engineering 231 .....	3	*Broadcast Systems 232 .....	3
Television Productions 261 .....	6	Television Programming 262 .....	6
Government 231 .....	3	Government 232 .....	3
*Approved Elective .....	3	*Approved Elective .....	3
Physical Education .....	1	Physical Education .....	1
	16		16

### COURSE DESCRIPTIONS

#### 131. Radio and TV Announcing. (3-3). Credit 3.

Duties and responsibilities of the announcer. Operation of the audio console, audio-tape recorders, turntables, and other broadcast equipment. The principles of voice production, diction, and microphone techniques, and practice in writing and presenting commercial copy, news coverage and documentaries for radio and television production. Practical experience will offer opportunities to act as announcers for KNCT radio and television on-air programs.

#### 132. Broadcast Technology. (3-3). Credit 3.

This course will introduce the student to radio and television broadcasting laws, treaties, and Federal Communications Commission regulations; block diagramming of station layouts and electronic schematics; terminology and operating principles of the broadcast stations as required to qualify for the FCC Third Class Radiotelephone Operators Permit.

#### 133. Station Management. (3-3). Credit 3.

Radio and television station management; Federal Communications Commission rules and regulations for station licensing requirements. The analysis of technical problems in operations, programming, traffic, logs, schedules, news, sales and services, network affiliations, and market and audience surveys.

#### 134. Radio Programming. (3-3). Credit 3.

Fundamental techniques and practices required for production and programming for radio. The relationship of radio and television to other mass communication media. Broadcast as a vehicle for the cultural, informational, and educational arts when broadcasting in the public interest as specified by the rules and regulations of the Federal Communications Commission. Prerequisite: Telecommunications 131.

\*Students desiring to concentrate in broadcast production and programming rather than preparation for the FCC Second and First Class Radiotelephone Operators Licenses may substitute courses in Journalism, Art, Speech, Music, Photography, Theatre Arts, or foreign language. Approved electives must also be chosen from the foregoing.

**135. Broadcast Electronics. (3-3). Credit 3.**

Objectives of this course will be to acquire sufficient knowledge in basic radiotelephone operation to qualify for the Second Class Radiotelephone Operators License. This course will include math of electronics, AC, DC, Ohms Law, oscillators, amplifiers, transmitters, receivers, and circuitry associated with their operation. Prerequisite: Telecommunications 132.

**231. Broadcast Engineering. (3-3). Credit 3.**

Advanced radio and television theory and installation principles to include transmission of television signals in black and white and color modes plus technical knowledge necessary to qualify for FCC First Class Radiotelephone Operators License. Prerequisite: Telecommunications 135.

**232. Broadcast Systems. (3-3). Credit 3.**

In-depth study of types of equipment to be found in varied broadcast configurations. Advanced trouble-shooting procedures, field engineering principles to include layout and design of broadcast facilities. This course will include on-the-job training in various radio and television engineering operations of KNCT-FM and TV on-air broadcast programming. Prerequisite: Telecommunications 231.

**261. Television Productions. (3-6). Credit 6.**

Skills, practices, and techniques required for television camera operation, good sound perspective, set design, graphic arts, and lighting. Master control operation, including the switcher, film chain, videotape recorder, and other equipment necessary to the act of broadcasting live studio productions and network affiliated programs. Prerequisite: Telecommunications 134.

**262. Television Programming. (3-6). Credit 6.**

Emphasis will be placed on laboratory experiences in planning, writing, producing, and directing representative types of television programs common to the broadcast media. Practical experience will offer opportunities to work as announcers, cameramen, floor managers, lighting technicians, technical directors, and video and audio engineers in live productions produced by KNCT-TV on-air programming. Prerequisite: Telecommunications 261.

**330. Advanced Television Programming. (3-3). Credit 3.**

The planning and preparation of programs with emphasis on dramatic values of composition, movement, position, action, timing, pacing, climax, ascendant and decending values; integration of the parts to the whole.

**331. Advanced Broadcast Engineering. (3-3). Credit 3.**

This course will introduce the student to technical engineering involved in television broadcast systems and high powered commercial broadcast stations. In this semester, student's awareness of standard engineering practices will be expanded by association with the "on-air" environment of KNCT-TV. Special emphasis will be placed on preparing for the technical background necessary for video applications.

**332. Advanced Television Programming. (3-3). Credit 3.**

A continuation of Advanced Television Programming 330 with emphasis on the coordination of talent, camera, visuals, audio and lighting with the dramatic values of the presentation; practical experience in production of programs covering such activities as news, drama, variety, discussion, and public service.

**333. Advanced Broadcast Engineering. (3-3). Credit 3.**

This course will be a continuation of Telecom 331, and will be designed to prepare the student for the FCC First Class Radiotelephone Operators License exam. Additional emphasis will be placed on the role of Chief Engineer of an "on-air" station.

**334. Educational Television. (3-3). Credit 3.**

A survey of educational television from its beginnings to the present; its similarities and differences as compared to commercial broadcasting; its multiple capabilities of enrichment, augmentation and direct instruction, and its future role in education.

**335. Photographic Arts. (3-3). Credit 3.**

Techniques and operational practices in film making and still photography for television and allied fields. Laboratory work in editing, splicing, continuity, and use and maintenance of the motion picture and still photography camera and related equipment.

**341. Telecast Operations. (1-5). Credit 4.**

This course is designed to be an on-air work experience for the student of Telecommunications. Each student will rotate job responsibilities in all areas of production, programming, and technology relating to on-air offerings of the KNCT-TV and KNCT-FM radio broadcasts.

**342. TV Systems Engineering. (1-5). Credit 4.**

This course will be designed to develop the work experience background required in modern-day broadcast facilities. In addition to the on-the-air experience special attention will be given to field engineering including installation theory and practice.

**343. Station Management Practices. (1-5). Credit 4.**

Practical experience in station management and operations with emphasis on management techniques, human relations, station operation, legal and technical responsibilities, and the rules and regulations of the Federal Communications Commission.

**344. Telecast Operations. (1-5). Credit 4.**

A continuation of Telecast Operations 341 with opportunities to create and present representative programs from the development of basic ideas to their final productions for on-air presentation credit as writer-producer-director.

**345. TV Systems Engineering. (1-5). Credit 4.**

This will be a continuation of Telecom 342. Special emphasis will be placed on the role of consulting engineer in relation to modern-day as well as future radio and television technology.

**346. Station Management Practices. (1-5). Credit 4.**

A continuation of Station Management Practices 343, with an investigation into practices and procedures in buying or starting a new broadcast station, acquiring the facilities, FCC licensing requirements, equipping the station, marketing and establishing the station image.

**Note:** Prerequisites of courses offered may be waived on approval of the instructor for students demonstrating advanced training and abilities in broadcast technology.

## **ADULT EDUCATION PROGRAM**

The purpose of the Adult Education Program at Central Texas Texas College is to meet the continuing educational needs of the adults in the area. To achieve this purpose, organized programs of instruction will be provided in response to expressed public demand and area needs. These offerings serve both general and specific educational purposes.

The Adult Education Program is based on the philosophy that the entire area benefits when individual members are successful in meeting their own economic responsibilities and are skilled and competent in their chosen vocations. The intent of adult classes is to provide training for the individual rather than to provide training for employees of a particular company or organization. Therefore, classes are open to the general public.

Classes are geared to the changing needs of the area and changing requirements of businesses and industries in which citizens of the area are employed. These changes are continuously reflected in the course content.



Training is given in areas where job opportunities clearly exist for trained workers and requests for such training have been made by citizens of the area. The programs of study herein described are designed to prepare the student for jobs in business and industry, to insure job competency, and to provide a better understanding of civic responsibilities.

**Vocational Education:** Vocational courses are designed to offer educational opportunities above the high school level through which adults in the area may qualify for initial employment, increase their vocational proficiency once they have obtained employment, and make satisfactory advancement within their chosen vocations.

**Business Education:** Classes offered in business are the result of close and constant cooperation between the College and the business community. In many cases, classes are established on the basis of specific requests from area agencies such as the board of realtors, merchants' associations, and chambers of commerce. In areas of real estate, data processing, management, and retailing and marketing, the business program is strengthened by the assistance received from the committees composed of representatives from business, the military, industry, labor, management, and education. These advisory groups assist in developing guidelines for program development relative to occupational requirements and standards. Through this procedure, all business courses, including secretarial and clerical courses, are developed to provide adult students pre-employment and in-service training in areas of knowledge and skills necessary to meet occupational requirements of the area.

**Homemaking and Parent Education:** Since the American home is the cornerstone of American society, the improvement of that institution is one of the goals of the Adult Education Program. This program will include classes in parent education and family relations. It will provide counseling for parents on wholesome methods and procedures relating to behavior, guidance, and learning at each stage of child development. Adult education also cooperates with teachers in the elementary schools in providing training for parents which will assist them in helping their children in the development of fundamental skills. Instructions in the knowledge, techniques, and skills of homemaking are included in this curriculum.

**Practical Arts:** The appreciation of, and participation in, practical arts and vocational interests are essential to the welfare of our society. Adults need opportunities to grow as intellectual and emotional beings, to share in the culture of the past and present, to find worth while outlets through experiences in the arts and

crafts. Many students find the real joy of living in the experiences of creation and appreciation. While instruction in these activities is not allowed to dominate the program, it is encouraged as a definite part of the educational curriculum of the adult program.

## **ADULT EDUCATION COURSES**

(No college credit)

### **Advertising**

Advertising and the News Media  
Copywriting and Layout  
Public Relations  
Interior and Window Display

### **Banking**

Bookkeeping  
Business Law and Banking  
Business Letters and Banking  
Money and Banking  
Public Speaking  
Negotiable Instruments  
Business Administration and Banking  
Banking Economics

### **General Business**

Math for Retailing  
Letter Writing  
Business Speech  
Rapid Reading for Business  
and Professional Personnel  
Business Communications  
Employee Communications  
Employee Training  
Credit and Collections  
Principles of Supervision  
Human Relations  
Record Keeping for Small Businesses  
Standards for Secretaries  
Legal Receptionist  
Medical Receptionist  
Spanish for Business  
PBX Receptionist  
Shorthand Refresher Course  
Typewriting Improvement  
Store Security and Hot Checks  
Personnel Relations

**Insurance**

Insurance Underwriting  
Insurance Adjusting  
Life Insurance  
Automobile Insurance  
C. L. U.

**Business Management**

Bookkeeping for Small Businesses  
Accounting Systems  
Income Tax Problems and Procedures  
Credit Management  
Purchasing  
Personnel Supervision  
C.P.A. Review

**Real Estate**

Real Estate Appraisal  
Real Estate Salesmanship  
Review Course for Brokers  
and Salesman License

**Salesmanship**

Basic Salesmanship  
Advanced Salesmanship  
Public Relations

**Homemaking**

Interior Decoration  
Meal Planning and Preparation  
Basic Clothing Construction  
Intermediate Clothing Construction  
Advanced Clothing Construction  
Home Nurse Development

**Other Non-Credit Courses**

Federal Service Entrance Examination  
Basic Ceramics  
Women's Conditioning Class  
Creative Thinking  
Great Books Lectures  
Archaeology for Beginners  
Anthropology for Beginners  
Blueprint Reading  
Basic Drawing  
Driver's Education  
General Education Development (GED)

Anthropology for Beginners  
Archaeology for Beginners  
Basic Ceramics  
Basic Drawing  
Basic Photography  
Beginning Welding  
Blue Print Reading  
Bridge  
Child Psychology  
Conversational Spanish  
Creative Thinking  
Driver's Education  
Federal Service Entrance Examination  
Flower Arrangement  
Genealogy  
General Education Development (GED)  
Great Books Lectures  
Income Tax  
Livestock Management  
Speed Reading and Comprehension for Adults  
Speed Reading and Comprehension for Children  
Women's Conditioning Class

### **Special Requests**

Other non-credit courses may be arranged to meet specific requests from interested persons.

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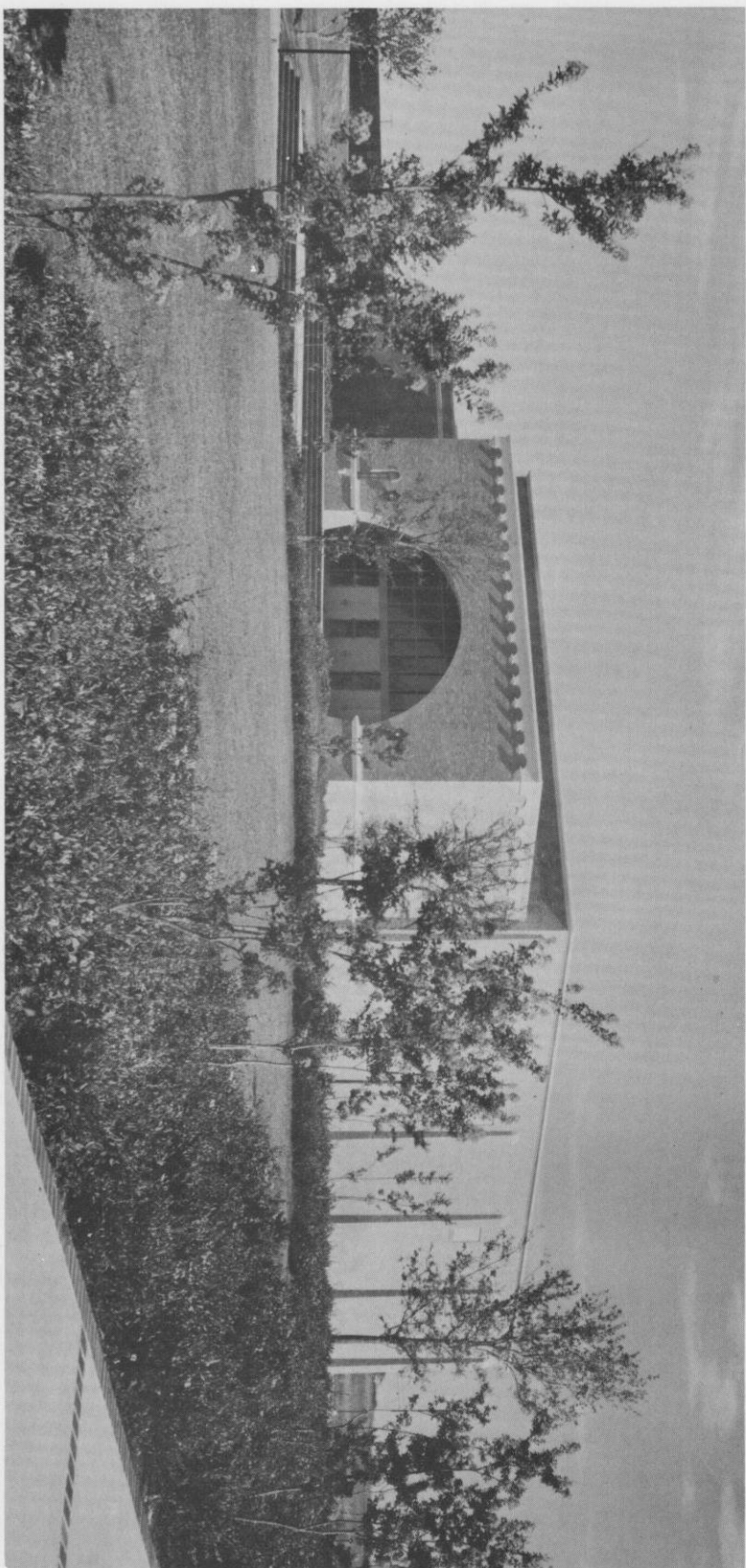
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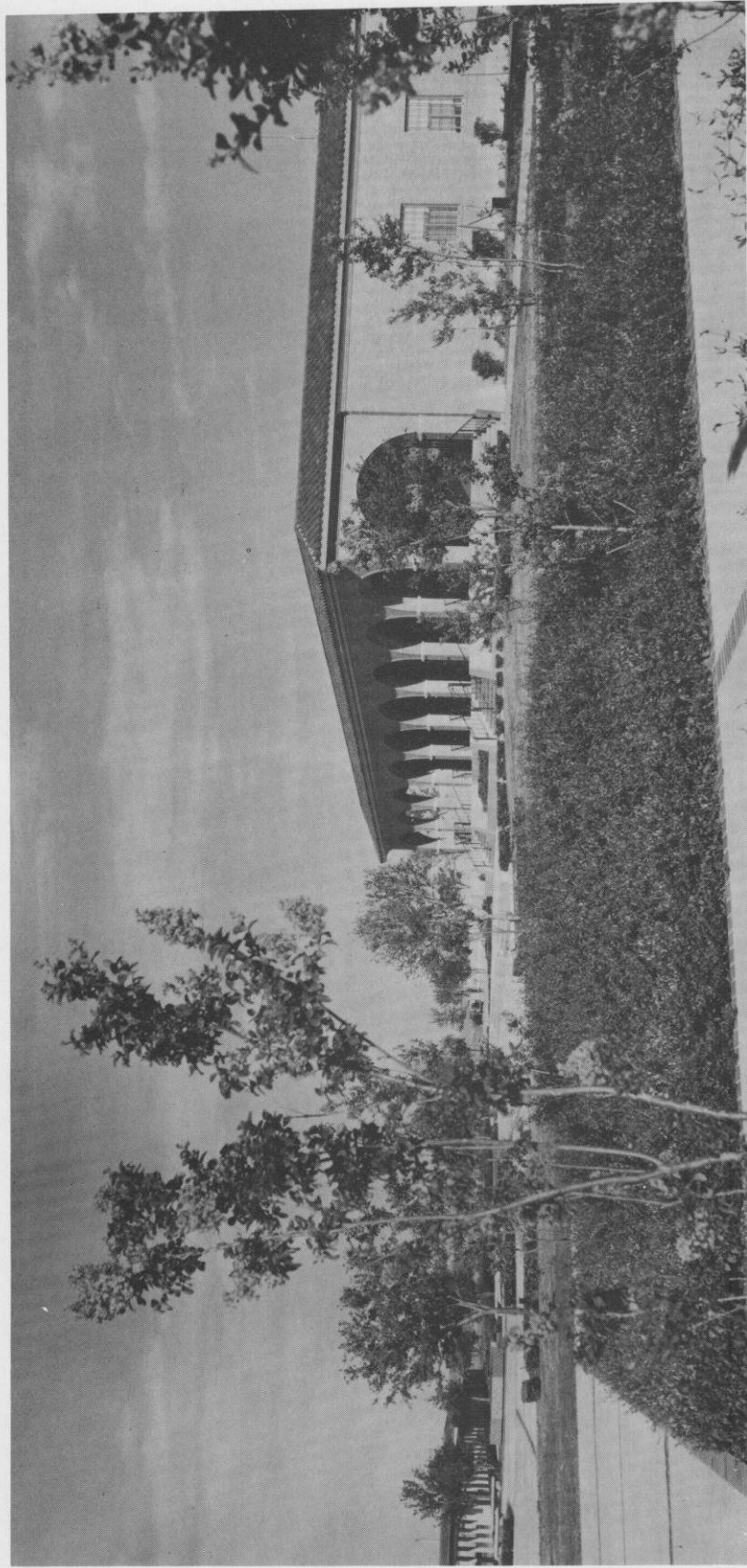
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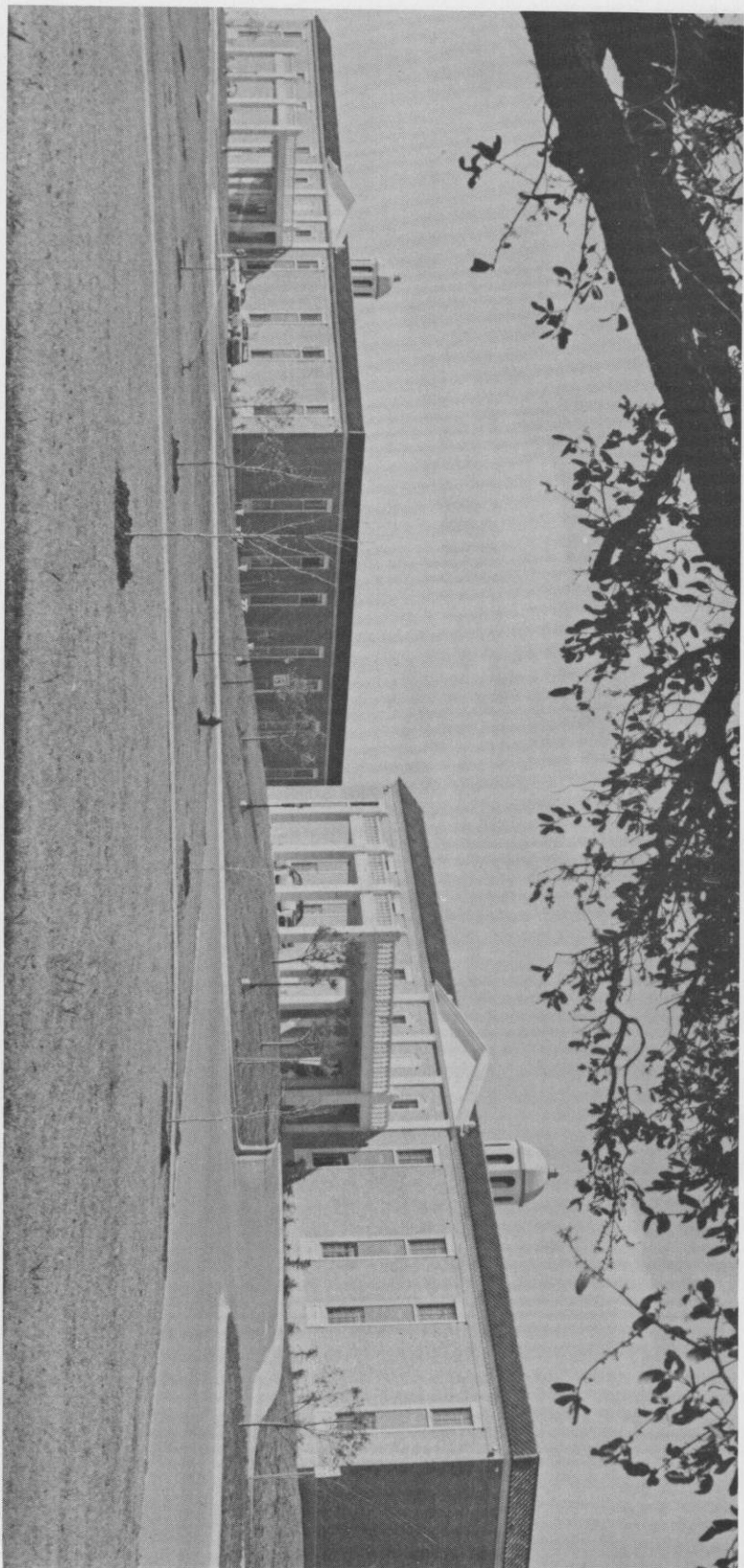




Gymnasium



Student Service Occupations Center

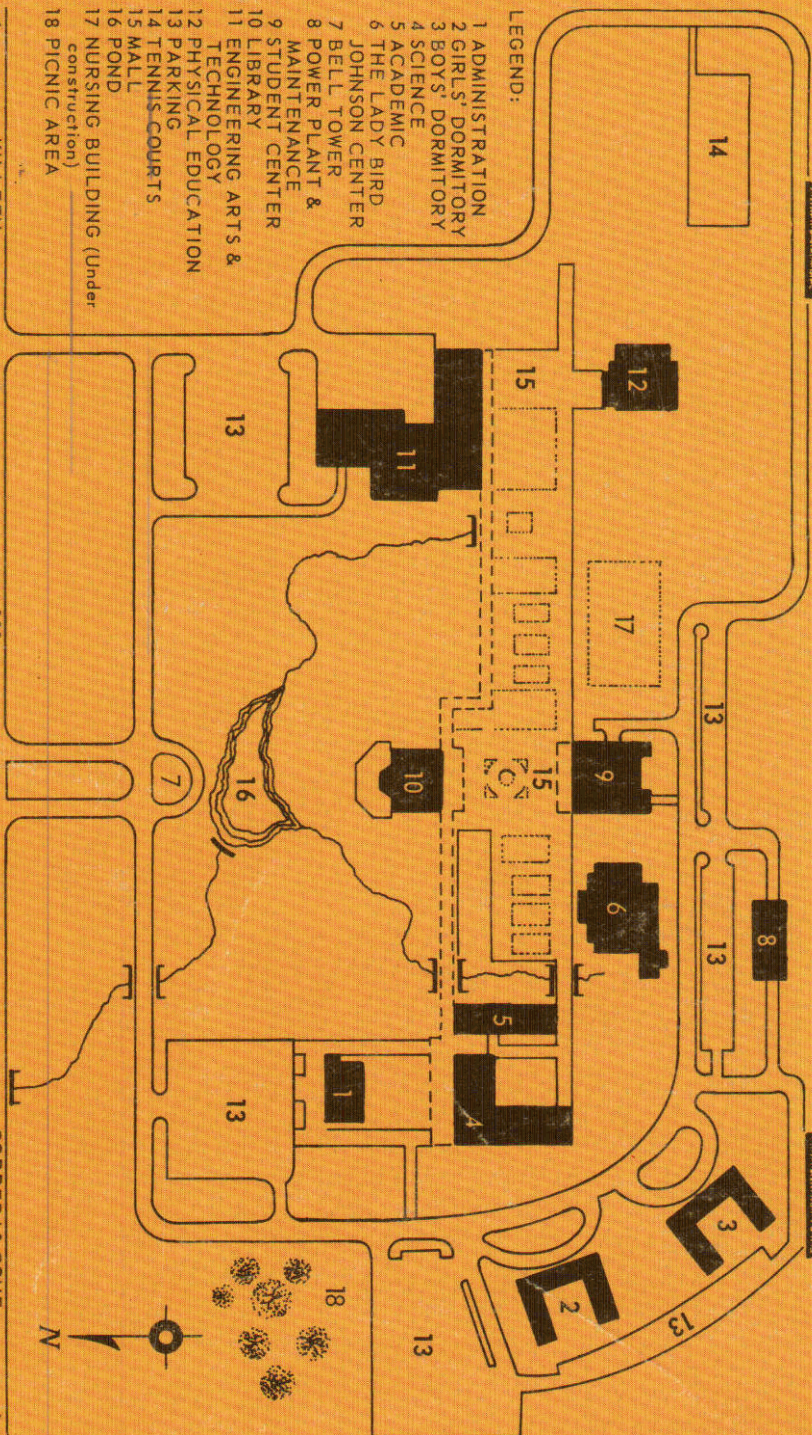


(l. to r.): South and North Residence Hall at Central Texas College.



# Central Texas College Campus

- LEGEND:
- 1 ADMINISTRATION
  - 2 GIRLS' DORMITORY
  - 3 BOYS' DORMITORY
  - 4 SCIENCE
  - 5 ACADEMIC
  - 6 THE LADY BIRD JOHNSON CENTER
  - 7 BELL TOWER
  - 8 POWER PLANT & MAINTENANCE
  - 9 STUDENT CENTER
  - 10 LIBRARY
  - 11 ENGINEERING ARTS & TECHNOLOGY
  - 12 PHYSICAL EDUCATION
  - 13 PARKING
  - 14 TENNIS COURTS
  - 15 MALL
  - 16 POND
  - 17 NURSING BUILDING (Under construction)
  - 18 PICNIC AREA



KILLEEN

U.S. 190

COPPERAS COVE

N