TEXARKANA COMMUNITY COLLEGE 1927

CATALOG 1980-82

H. Click

TEXARKANA COMMUNITY COLLEGE

2500 NORTH ROBISON ROAD
TEXARKANA, TEXAS

APPROVED AND ACCREDITED

by

The Association of Texas Colleges
The Southern Association of Colleges and Schools
The Texas Education Agency
The Coordinating Board, Texas College and University System
Texas State Board of Nurse Examiners
National League for Nursing
Federal Aviation Agency
Texas Association of Music Schools

MEMBERSHIP

in

The Southern Association of Junior Colleges
American Association of Junior Colleges
Texas Association of Junior Colleges
National Commission on Accrediting
Texas Association of Collegiate Registrars and Admission Officers
Texas Eastern Athletic Conference
American Council on Education
National Association of Schools of Music
Texas Music Educators Association
Texas Association of Art Schools
American Technical Education Association, Inc.

AN EQUAL EDUCATIONAL OPPORTUNITY INSTITUTION

This catalog contains policies, regulations, and procedures which were in existence as the publication went to press. The College reserves the right to modify or amend any statement or policy to reflect current Board policies, administrative regulations or procedures and applicable State or Federal laws and regulations.

TEXARKANA COMMUNITY COLLEGE
BOARD OF TRUSTEES
1980-1981

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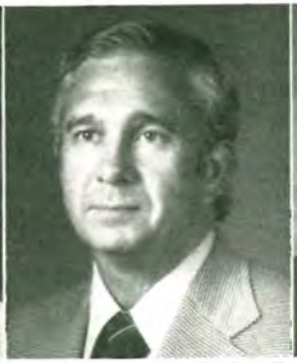
President



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Mr. Ben Sandefur

Mr. Cecil Phillips

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PRESIDENT'S MESSAGE

Welcome to Texarkana Community College —

And congratulations! Congratulations?

That's right, congratulations, because whether you made a conscious or an unconscious choice, you've made the *best* — the wisest — choice possible for a college at which to begin or continue your education. Texarkana Community College is second to none in its ability to provide you with a quality education. We're blessed with first-rate facilities, equipment, and, most important of all, a first-rate faculty. Take advantage of it because all of this belongs to *you*!

Should you be at TCC to get the first two years of the Baccalaureate degree, rest assured you will get the freshman/sophomore background equal to, or better than, any four-year institution you care to name. In follow-up studies, routinely conducted with our transfer students, we find each year that TCC students, upon transfer, do as well as, or better than, the "native" students at the University of Arkansas, the University of Texas, Texas Tech, or East Texas State University. So don't worry that you won't be prepared when you transfer — you will — if you work at it.

And — if you are enrolled in one of TCC's many vocational-technical programs — apply yourself, successfully complete the program, and the world of work awaits you.

And — should you be one of the hundreds of students enrolled in one of TCC's many non-credit courses just for the sheer joy and pleasure of learning something new — great! The old adage — "Beware ye of disuse atrophy — it is damaging and may be irreversible" works for one's mind as well as one's body.

Whatever your goal —

It's all here for you. Develop the habit of working hard and playing hard — but when it's time to work — don't play at all. That's a habit that will see you successfully through life.

Welcome then — and best wishes.

Dr. Carl M. Nelson
President
Texarkana Community College

Dr. Carl Nelson

TCC CALENDAR 1980-81

August 4, 1980	Registration begins
August 16, 1980	ACT Test: 8:00 a.m., Chemistry Building
August 25, 1980	Placement Test: Music, 1:00 p.m., Music Building
August 29, 1980	Faculty Seminar
September 1, 1980	Labor Day Holiday
September 2, 1980	Day and evening classes begin
September 8, 1980	Last day for 100% refund
September 9, 1980	Last day to register and pay
September 15, 1980	Last day for 50% refund
October 24, 1980	Mid-semester
November 27-28, 1980	Thanksgiving Holidays
December 1, 1980	Last day to drop classes
December 15-18, 1980	Final exams
December 2, 1980	Spring registration begins
January 10, 1981	ACT Test: 8:00 a.m., Chemistry Building
January 19, 1981	Day and evening classes begin
January 23, 1981	Last day for 100% refund
January 26, 1981	Last day to register and pay
January 30, 1981	Last day for 50% refund
March 13, 1981	Mid-semester
March 23-27, 1981	Spring Holidays
April 27, 1981	Last day to drop classes
May 11-14, 1981	Final exams
May 11, 1981	First summer registration begins
May 19, 1981	Graduation

FIRST SUMMER SESSION

May 11, 1981	Registration begins (Day classes)
June 1, 1981	Day classes begin
June 2, 1981	Last day for 100% refund
June 3, 1981	Last day to register and pay—First summer session
June 4, 1981	Last day for 50% refund
July 2, 1981	Last day to drop (Day classes)
July 9, 1981	Last day of classes

EVENING SESSION

May 11, 1981	Registration begins (Evening classes)
June 1, 1981	Evening classes begin
June 2, 1981	Last day for 100% refund—Evening classes
June 3, 1981	Last day to register and pay—Evening classes
June 4, 1981	Last day for 50% refund—Evening classes
July 16, 1981	Last day to drop (Evening classes)
July 23, 1981	Last day of evening classes

SECOND SUMMER SESSION

July 8, 1981	Registration begins
July 13, 1981	First day of classes
July 14, 1981	Last day for 100% refund
July 15, 1981	Last day to register and pay—Second summer session
July 16, 1981	Last day for 50% refund
August 13, 1981	Last day to drop (Day classes)
August 20, 1981	Last day of classes

TCC CALENDAR 1981-82

August 3, 1981	Fall registration begins
August 15, 1981	ACT Test: 8:00 a.m., Chemistry Building
August 24, 1981	Placement Test: Music, 1:00 p.m., Music Building
August 28, 1981	Faculty Seminar
August 31, 1981	Day and evening classes begin
September 4, 1981	Last day for 100% refund
September 7, 1981	Labor Day Holiday
September 8, 1981	Last day to register and pay
September 14, 1981	Last day for 50% refund
October 23, 1981	Mid-semester
November 26-27, 1981	Thanksgiving Holidays
November 30, 1981	Last day to drop classes
December 14-17, 1981	Final exams
December 1, 1981	Spring registration begins
January 9, 1982	ACT Test: 8:00 a.m., Chemistry Building
January 18, 1982	Day and evening classes begin
January 22, 1982	Last day for 100% refund
January 25, 1982	Last day to register and pay
January 29, 1982	Last day for 50% refund
March 12, 1982	Mid-semester
March 22-26, 1982	Spring Holidays
April 26, 1982	Last day to drop classes
May 10-14, 1982	Final exams
May 18, 1982	Graduation

FIRST SUMMER SESSION

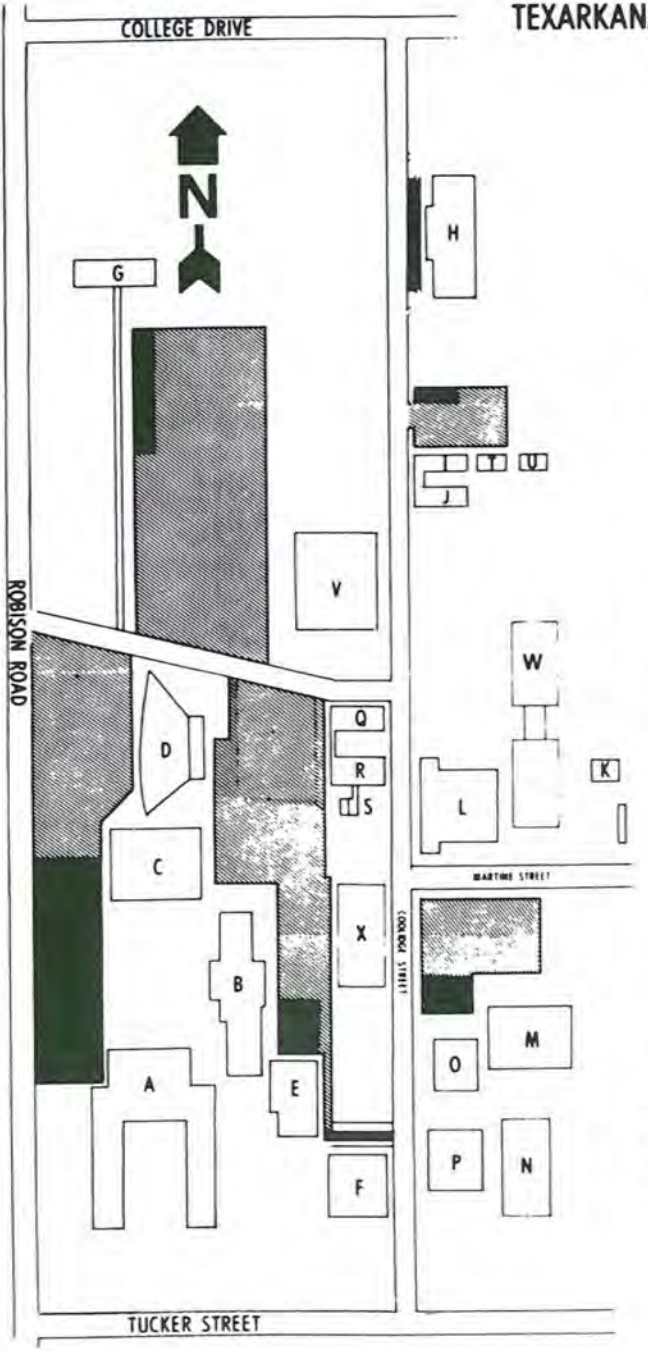
May 10, 1982	Registration begins (Day classes)
May 31, 1982	Day classes begin
June 1, 1982	Last day for 100% refund
June 2, 1982	Last day to register and pay—First summer session
June 3, 1982	Last day for 50% refund
July 1, 1982	Last day to drop (Day classes)
July 8, 1982	Last day of classes

EVENING SESSION

May 10, 1982	Registration begins (Evening classes)
May 31, 1982	Evening classes begin
June 1, 1982	Last day for 100% refund
June 2, 1982	Last day to register and pay—Evening session
June 3, 1982	Last day for 50% refund
July 15, 1982	Last day to drop (Evening classes)
July 22, 1982	Last day of evening classes

SECOND SUMMER SESSION

July 7, 1982	Second summer registration begins
July 12, 1982	First day of classes
July 13, 1982	Last day for 100% refund
July 14, 1982	Last day to register and pay—Second summer session
July 15, 1982	Last day for 50% refund
August 12, 1982	Last day to drop (Day classes)
August 19, 1982	Last day of classes



TEXARKANA COMMUNITY COLLEGE LEGEND

A - ADMINISTRATION
B - STUDENT CENTER
C - CLASSROOM
D - AUDITORIUM
E - GYMNASIUM
F - PALMER MEMORIAL LIBRARY
G - LANGUAGE ARTS
H - CAREER EDUCATION
I - ART
J - VOCATIONAL - ANNEX
K - MAINTENANCE
L - AQUATIC CENTER
M - BUCHANAN NURSING
N - ENGINEERING, MATH, PHYSICS
O - BIOLOGY
P - CHEMISTRY
Q - MUSIC
R - AGRICULTURE
S - GREENHOUSE
T - ELECTRONICS
U - SMALL ENGINES
V - ETSU AIKIN BUILDING
W - TENNIS COURTS
X - STILWELL HUMANITIES

STUDENT PARKING

FACULTY PARKING

COLLEGE MAP

TABLE OF CONTENTS

Administrative Staff 10

Faculty 11

General Information 24

Philosophy and Objectives 28

Requirements for Admission 30

Requirements for Graduation 32

Credit by Examination 35

Scholastic Probation and Suspension 36

Rules and Regulations 36

Student Activities 39

Student Services 40

Clubs and Organizations 41

Athletics and Sports 43

Tuition and Fees 46

Financial Assistance 50

Evening and Continuing Education 55

Senior Citizen Program 58

Programs of Study 59

Course Descriptions 131

ADMINISTRATIVE STAFF

OFFICERS OF ADMINISTRATION

Carl M. Nelson, Ed.D. ..... President
Levi H. Hall, M.A. ..... Dean of Instruction
Bill R. Hughes, M.S.E. ..... Dean of Students
B.J. Murdock, M.A. ..... Dean of Program Development
Jeff Marsee, M.A. ..... Dean of Business Affairs
Frank Coleman, M.S. ..... Director of Admissions
Dale Works, M.Ed. ..... Associate Dean of Evening & Continuing Education
David Mueller, M.Ed. ..... Associate Dean of Instruction, Occupational/Technical Programs
Mike Wages, B.B.A. ..... Director of Financial Aids
Steve Middlebrooks, M.S. ..... Director of Community Relations
Helen Click, M.L.S. ..... Librarian
Georgia McFaul, M.Ed. ..... Director of Counseling & Guidance
DuWayne Elliott, M.S. ..... Director of Learning Resource Center
Norman Kauffman ..... Supervisor of Maintenance, Buildings, Grounds, & Transportation
Ben Cox, B.B.A. ..... Student Center Manager

INSTRUCTIONAL DIVISION CHAIRMEN

Herman Barnett, M.Ed. ..... Business Administration Division
Shirley Finn, M.S. ..... Health Occupations Division
Rolfe Wylie, M.S.E. ..... Humanities Division
Richmond White, M.S. ..... Mathematics, Engineering, Physics & Technology Division
Royce Granberry, Ed.D. ..... Science & Technology Division
Bob Bell, M.Ed. ..... Social Science Division

FACULTY

David H. Adams (1974) ..... Agriculture
B.S. Sam Houston State University
M.Ed. Sam Houston State University
East Texas State University-Commerce

Ronald P. Addington (1977) ..... Journalism
B.S.E. Henderson State University
M.S.E. Indiana University
Ed.D. University of Arkansas

Murry Alewine (1965)..... Music
B.M.E. Sam Houston State University
M.A. Sam Houston State University
Ph.D. University of Miami
University of Texas

Yewoul Allen (1978)..... Heavy Equipment Mechanics
T.E.A. Certified

William Corbett Anderson (1973) ..... Graphic Arts
B.A. Stephen F. Austin State University
M.A. Stephen F. Austin State University

Stewart Angel (1975)..... Mathematics
B.S. Sam Houston State University
M.A. Sam Houston State University

Pauline Barnes, R.N. (1974) ..... Nursing
Northeastern Hospital School of Nursing (Diploma)

Herman H. Barnett (1967)..... Business Administration
B.S.E. Henderson State College
M.Ed. East Texas State University-Commerce
Texas A&M

Lasca Beck, R.N. (1968)..... Nursing
B.S.N. Texas Woman's University
M.Ed. East Texas State University-Commerce

Bob Bell (1969)..... Psychology
B.S.E. Henderson State College
M.Ed. University of Arkansas
Abilene Christian College
Trinity University
University of Oklahoma
University of Texas
North Texas State University

Jack Bender (1975) ..... Auto Mechanics
L.A. Trade Technical College
Texarkana College
T.E.A. Certified

John B. Benson (1968) ..... Psychology
B.A. Berea College
M.S.E. Henderson State College
D.A.S. University of Arkansas
George Williams College
Southern State University

John R. Biglin (1976) ..... Business Administration
B.A. Montclair State College
M.A. Montclair State College

Kathleen Blackard, R.N. (1976) ..... Nursing
A.D.N. Texarkana College
B.S.N. Northwestern State University
M.S.N. University of Texas at Arlington

Kathryn Blake (1968) ..... Related Education
B.S. Bishop College

Debbie Bockmon (1979) ..... Nursing
B.S.N. University of Texas at Austin
M.S.N. University of Wisconsin at Madison

Jane A. Bouterse (1971) ..... English
A.A. Texarkana College
B.A. University of Texas
M.L.A. Southern Methodist University
East Texas State University-Texarkana
Utah State University

Ed Braddock (1972) ..... Biology
B.S. Bethany Nazarene College
M.S. East Texas State University-Commerce
Colorado State University
Texas A&M

Frank T. Bransford (1973) ..... Auto Mechanics
T.E.A. Certified

Elaine Bransford, R.N. (1961) ..... Nursing
B.S.N. University of Maryland
M.Ed. East Texas State University-Texarkana

Ronald Bright (1970) ..... Counselor, Vocational
B.S. University of Houston
M.Ed. University of Houston

Robert H. Brown (1979) ..... Physics
B.S.E.E. Pacific States University
M.S. East Texas State University-Commerce
University of Arizona

David Brown (1974) ..... Mid-Management
A.A. Texarkana College
B.A. University of Texas
M.S. East Texas State University-Commerce
East Texas State University-Texarkana

Michael L. Buttram (1971) ..... Chemistry
B.A. East Texas State University-Commerce
M.S. East Texas State University-Commerce
Ph.D. University of Louisville

William R. Caver (1967) ..... Art
B.S.E. North Texas State University
M.F.A. University of Guanjuato
University of Texas
University of the Americas
Universidad de Barcelona, Spain
East Texas State University-Texarkana

Helen Click (1964) ..... Librarian
B.A. Hendrix College
M.L.S. Texas Woman's University

Frank B. Coleman, Jr. (1974) ..... Director of Admissions
B.S. Southern State College
M.S. State College of Arkansas
University of Arkansas, Little Rock

Nona Eagle Culpepper (1968) ..... Music
B.A. Hendrix College
M.M.E. North Texas State University

Gladys C. Cupp (1967) ..... English
B.A. Texas Wesleyan College
M.A. East Texas State University-Commerce

Levonne Davis (1968) ..... History
B.A. University of Texas
M.A. University of Texas
East Texas State University

Sandra Dennis, R.N. (1976) ..... Nursing
B.S.N. University of Alabama School of Nursing
M.S.N. University of Texas at Arlington

Warren S. Dill (1966) ..... Biology
B.S. North Texas State University
M.S. North Texas State University
Ed.S. New Mexico State University
Texas A&M University

James Dillard (1971) ..... Truck Driving
T.E.A. Certified

Delbert Dowdy (1978)..... Physics/Math
B.S. University of Texas at Arlington
M.S. North Texas State University

Sharon Drake (1971) ..... English
B.S.E. Henderson State College
M.S.E. Henderson State College
East Texas State University
University of Mississippi

Henry R. Duke, Jr. (1969)..... Physical Education
B.S. East Texas Baptist College
M.Ed. North Texas State University

Hubert G. Dungan (1968)..... Physical Education
B.A. Ouachita Baptist University
M.A. North Texas State University
Southwestern Baptist Theological Seminary

DuWayne Elliott (1970) ..... Director of the Learning Resource Center
B.S. East Texas State University-Commerce
M.S. East Texas State University-Commerce

Shirley S. Finn, R.N. (1966) ..... Nursing
Saint Agnes School of Nursing
B.S.N. Saint Augustine College
M.S.N. Texas Woman's University

Bob Forward (1974)..... Computer Programmer
B.S. Ouachita University
East Texas State University-Texarkana

Norell Daline Ford, R.N. (1975)..... Nursing
Lutheran Hospital School of Nursing,
Vicksburg, Mississippi (Diploma)
B.S. Southwest Texas State University

Roy Foster (1978) ..... Data Processing
B.S. East Texas State University-Commerce
M.Ed. East Texas State University-Commerce

Thomas W. Furlow (1978) ..... Industrial Electricity
B.S.E.E. University of Arkansas
M.S.E. George Washington University

DeWayne Godwin (1978) ..... Auto Mechanics
T.E.A. Certified

Larry Gordon (1970) ..... Air Technology
Western Kentucky University
B.S. Louisiana Tech University
M.S. East Texas State University-Texarkana

Royce Granberry (1966) ..... Agriculture
A.S. Texarkana College
B.S. East Texas State University-Commerce
M.S. East Texas State University-Commerce
Ed.D. Oklahoma State University

Levi H. Hall (1965) ..... Dean of Instruction
B.A. North Texas State University
M.A. Tulane University

Wayne M. Harris (1978) ..... English
B.S. Southwest Texas State University
M.A. Southwest Texas State University
M.Ed. East Texas State University-Commerce
Ed.D. East Texas State University-Commerce

Errol Hatfield (1969) ..... Business Administration
B.S. University of Southern California
M.B.A. University of Southern California

Jimmy R. Hawkins (1969) ..... Government
B.S. East Texas State University-Commerce
M.S. East Texas State University-Commerce

Sadie Hawkins R.N. (1979) ..... Nursing
A.D.N. Texarkana College
B.S.N. Texas Woman's University

James W. Herrin (1968) ..... Music
B.M. Centenary College
M.M. University of Oklahoma

Adolphus Hinton (1974) ..... Mid-Management
B.A. Prairie View A&M
M.A. University of Oklahoma
Texarkana Community College
East Texas State University

Carol Hodgson, R.N. (1972) ..... Nursing
A.D.N. Texarkana Community College
B.S.N. University of Texas School of Nursing

Jena Howell, R.N. (1975) ..... Nursing
A.D.N. Texarkana College
B.S. Bradley University

Billy Ray Hughes (1965) ..... Dean of Students
B.S. Henderson State College
M.S.E. Henderson State College
University of Arkansas
East Texas State University-Commerce

Lou Ella Humphrey, R.N. (1960) ..... Nursing
Arkansas Baptist Hospital School of Nursing
B.S. East Texas State University Texarkana
Texas Woman's University

David Jackson (1973) ..... Auto Mechanics
T.E.A. Certified

Dell Jacobs (1951) ..... Business Administration
B.B.A. University of Texas
M.B.A. East Texas State University-Commerce
North Texas State University
University of Arkansas
East Texas State University-Commerce

Dawson Johnson (1978) ..... Director of Computer Center
B.S. East Texas State University-Commerce
M.S. East Texas State University-Commerce

Jesse V. Jordan (1973) ..... Auto Mechanics
T.E.A. Certified

Milton Keahey (1969) ..... Auto Body Repair
T.E.A. Certified

Lucy Larey (1969) ..... Sociology/Geography
B.S.E. Henderson State College
M.A. George Peabody College
Texas Technological University

Mary Lewis (1968) ..... English
B.A. Newcomb College of Tulane
M.A. University of Arkansas
Henderson State College
Tyler Junior College
Sam Houston State College
University of St. Andrews, Scotland
East Texas State University-Texarkana

Gene Livingston, R.N. (1960) ..... Nursing
B.S.N. Texas Christian University
M.Ed. East Texas University-Texarkana

Louise Loftness, R.N. (1977) ..... Nursing
A.D.N. Rochester Junior College
B.S.N. Texas A&I University at Corpus Christi
M.S.N. University of Texas at Arlington

Jerry Long (1979) ..... Speech/Drama
B.A. University of Houston
M.A. North Texas State University
University of Texas
University of Houston
Texas A & M University

Mary M. Long (1973) ..... Art
B.S.E. Henderson State College
M.S. East Texas State University-Commerce

Ken Loyd (1974) ..... Refrigeration/Air Conditioning
B.S.M.E. Southern Methodist University
Texarkana Community College
University of Texas

Bennie McBride (1978) ..... Truck Driving
T.E.A. Certified

Sue McCrossen (1968) ..... Music
A.A. Texarkana Community College
B.J. University of Texas
M.Ed. East Texas State University-Commerce

Georgia K. McFaul (1967) ..... Counseling
B.A. Louisiana Polytechnic Institute
M.Ed. East Texas State University-Commerce
East Texas State University

Joel R. McGee, III (1957) ..... Biology
B.A. East Texas State University-Commerce
M.Ed. East Texas State University-Commerce

Mike Maner (1979) ..... Data Processing
B.S. North Texas State University

Michael A. Mankins (1969) ..... Mathematics
B.A. University of Texas
M.S. Texas Woman's University

Charles Marley (1975) ..... Mid-Management
B.A. Ouachita Baptist University
M.Ed. East Texas State University-Texarkana

Glen Martin (1979) ..... Refrigeration/Air Conditioning
T.E.A. Certified

Harry Martin (1974) ..... Auto Mechanics
Le Tourneau College
P.B.T.A. College
Bob Jones University
T.E.A. Certified

Lester Meredith (1968) ..... Government
B.S. Sam Houston State College
M.A. Sam Houston State College
University of Missouri
University of Houston

Steve Middlebrooks (1969) ..... Director of Community Relations
B.B.A. Southern State College
M.S. East Texas State University-Texarkana

Robert R. Mills (1958) ..... Business Administration
B.S. East Texas State University-Commerce
M.Ed. East Texas State University-Commerce

Patricia Moore (1973) ..... Office Occupations
B.B.A. North Texas State University
M.B.A. East Texas State University-Commerce

Patricia Morgan, R.N. (1970) ..... Nursing
A.D.N. Texarkana College
B.S. East Texas State University-Texarkana
Texas Woman's University

Mary Mote, R.N. (1968) ..... Nursing
B.S.N. Northwestern State College
M.Ed. East Texas State University-Texarkana

David Mueller (1971)..... Associate Dean of Instruction, Occupational/Technical Programs
A.A. Texarkana College
B.S. Lamar Tech
M.Ed. East Texas State University-Commerce

Gloria Mugno, R.N. (1970)..... Nursing
Methodist Hospital of Dallas-School of Nursing (Diploma)
B.S.N. University of Texas at Arlington
M.Ed. East Texas State University-Texarkana

B.J. Murdock (1958)..... Dean of Program Development
B.S. Southern State College
M.A. East Texas State University-Commerce
East Texas State University

Charlotte Murdock (1968)..... Related Reading
B.S. Southern State University

Carl M. Nelson (1975)..... President
B.S. University of Arkansas
M.Ed. University of Arkansas
Ed.D. University of Arkansas

Norma Nelson (1960)..... Physical Education
B.S. East Texas State University-Commerce
M.S. East Texas State University-Commerce

R.T. Northam (1971)..... Truck Driving
T.E.A. Certified

Kenneth Parmley (1966)..... Mathematics
B.S. Stephen F. Austin State College
M.Ed. East Texas State University-Commerce
M.A. Louisiana State University
Emory University

James Parsons (1965)..... Biology
B.S. East Texas State University-Commerce
M.Ed. East Texas State University-Commerce
University of Oklahoma
Western Michigan University

Mildred C. Parsons (1965)..... Speech/Drama
A.A. Texarkana College
B.A. East Texas State University-Commerce
M.A. East Texas State University-Commerce

R. Frances Watson (1966) ..... Business Administration
B.A. Harding College
M.Ed. University of Texas
West Texas State College
George Peabody College

Joyce White, R.N. (1976) ..... Nursing
B.S.N. Texas Woman's University
M.S.N. University of Texas at Arlington

Nellie White (1970) ..... Assistant Librarian
B.S.E. Henderson State Teachers College
M.L.S. East Texas State University-Commerce

Richmond P. White (1962) ..... Engineering
B.S. East Texas State University-Commerce
M.S. East Texas State University-Commerce

David Williams (1975) ..... Auto Body
Texarkana College
Ohlone Junior College

Jayne Williams (1975) ..... English
B.A. Southern State College
M.S. East Texas State University at Texarkana
Texas Tech
University of Arkansas

Robert G. Williams (1959) ..... History
B.S. Stephen F. Austin State College
M.Ed. Stephen F. Austin State College
University of Texas
East Texas State University-Commerce
East Texas State University-Texarkana
L.L.D Jefferson University

Wayne J. Williams (1965) ..... Physical Education
B.A. Ouachita Baptist University
M.S.E. Henderson State Teachers College
East Texas State University-Commerce
Northern Arizona University
East Texas State University-Texarkana

Donly Joyce Wilson (1973) ..... Office Occupations
B.S.E. Arkansas State University
M.S.E. Arkansas State University

Henry W. Wood, Jr. (1959) ..... History
B.A. Ouachita Baptist University
M.A. East Texas State University-Commerce
Baylor University
University of Mississippi

Dale Works (1966) ..... Associate Dean of Evening & Continuing Education
B.S. Texas Christian University
M.Ed. North Texas State University
North Texas State University

Sue Works (1967) ..... Physical Education
B.S. Texas Christian University
M.Ed. North Texas State University
Texas Woman's University

Jerry Wright (1970) ..... Biology
A.A. Texarkana College
B.S.E. Southern State College
M.Ed. Texas A&M
Ed.S. Peabody College

Rolfe A. Wylie (1966) ..... Speech/English
B.S.E. Henderson State
M.S.E. Henderson State College
Texas Technological College
Ed.D. East Texas State University-Commerce

GENERAL INFORMATION

History of the College

Texarkana College was founded in 1927 as a public junior college and as a branch of Texarkana, Texas, Public School Systems. In the early beginnings, Dr. H. W. Stilwell served as both the Superintendent of Schools and as President of the College. W. P. Akin was selected as the first Dean of the College.

The first building housing the college was erected at the corner of 16th and Pine Streets. The building contained classrooms, laboratories, administration, teachers' offices, and a gymnasium. The building was solely owned by the school district, and the laboratories and gymnasium were jointly used by the college and the high school. Following legislation by the State of Texas, in 1941 the Texarkana College District was established by an election of the taxpayers of the public school district and a tax rate of 20 cents per 100 dollars of assessed valuation was passed at the same time.

The college showed a slow but steady growth from the 109 enrollment in 1927 until the end of World War II. It became increasingly apparent that the growth in enrollment caused by returning veterans demanded enlargement of the college facilities. Accordingly, an election was called in 1948 for the issuance of $40,000 in bonds to purchase a new campus and to finance the construction of new facilities. Upon passage of the bond issue, some 20 acres were purchased and the construction of the present Administration Building and the gymnasium was begun in 1950. The college moved to its present site in October, 1951. The enrollment for 1951-52 was 589 students.

In 1954 the taxpayers of the district voted to raise the tax rate to 40 cents per 100 dollars of assessed valuation. Shortly thereafter, bonds in the amount of $500,000 were voted for the construction of the College Auditorium and the Classroom Building.

In 1957, by action of the Board of Regents of the college and the Board of the Texarkana Independent School District, the same members serving on each Board, an agreement was reached to separate the two Boards. Shortly thereafter, Dr. Stilwell relinquished his duties as Superintendent of Schools and gave his full time to the presidency of the college.

In 1958, through the issuance of $475,000 in revenue bonds, the Student Center building was constructed and opened for use early in 1959. Through the issuance of revenue bonds, the College acquired additional acres. Using the same source of revenue, the following buildings were constructed: Boys' Dormitory, Music Building, Technical Building, and Bus and Maintenance shops. The Administration Building was air-conditioned, and numerous improvements were made to other buildings on the campus.

In November, 1959, Dr. Stilwell died. Dean W. P. Akin was appointed Acting President until Dr. Stilwell's successor, Dr. W. H. Hinton, was appointed in March, 1960. Mr. Akin then became Vice-President and served in

this capacity until the resignation of Dr. Hinton in June 1962. Mr. Akin was then made President and served until his death in September, 1963. Dean C. C. Burrus was named Acting President upon the death of Mr. Akin and served until March, 1964, when Dr. J. W. Cady was elected as the fourth President of the College. During Dr. Cady's administration, new Chemistry, Biology, Nursing, Engineering, Mathematics, Physics, Library buildings and an Aquatic Center housing an olympic size swimming pool were added.

In March, 1975, Dr. Cady resigned and Dean Levi Hall served as Acting President until Au) ust, 1975, when the Board selected Dr. Carl M. Nelson as President. Dr. Nelson is thus only the fifth President to serve Texarkana Community College in its fifty-year history.

The growth of the College can best be illustrated by comparing the enrollment of 109 students in 1927-28 with the enrollment of 4,209 students in 1976-77. Summer enrollment in 1928 was 25 students; in 1977 summer enrollment was 2,312 students.

In 1971, Texarkana Community College joined forces with East Texas State University at Texarkana in a unique co-operative venture which has benefited greatly the students of Texarkana and the surrounding community. ETSU/T teaches upper level courses junior, senior, and graduate courses—on the campus of Texarkana Community College thus making it possible for students to attend Texarkana Community College for the first two years of college education and then—never having to leave the campus—continue with certain baccalaureate and master's programs with East Texas State University/Texarkana. Each institution remains separate and distinct, with their own governing boards, their own administrations and faculties. In January of 1976 Texarkana College deeded approximately 3.8 acres of land to East Texas State University/Texarkana for that institution to build a two and one-half million dollar building on the site of the old football field. The building houses East Texas State University/Texarkana administration and faculty.

The cooperative arrangement of the institutions of higher learning is unique in the state of Texas and offers terrific advantages for the residents of this area. Educationally this is the best of all possible worlds—a two-year comprehensive community college with all of its diverse missions coupled with an outstanding four-year university offering baccalaureate and graduate training.

At fifty years old, Texarkana Community College is obviously mature and established. But even so, Texarkana Community College continues to be a vibrant developing institution constantly striving to be even better and always with an eye to the future.

Government

The government of Texarkana College is vested in a Board of Trustees consisting of nine members. Administration of the policies of the Board is delegated to the President of the college.

Classification, Affiliation, Standing

Texarkana Community College is approvvd and accredited as a two-year college by the Texas Education Agency, the Association of Texas Colleges, Texas State Board of Nurse Examiners, National League of Nurses, and the Southern Association of Colleges and Schools. The college is also a member of the Texas Association of Public Junior Colleges, the Texas Association of Junior Colleges, the Southern Association of Junior Colleges, and the National Commission on Accrediting.

Location

Texarkana College is located on the northwest border of the city of Texarkana, Texas, at the junction of Robison Road and Tucker Street, and abt ut three miles from the downtown business district. The campus adjoins the Sherwood, Oaklawn and Westlawn Additions to the city, and is near the Beverly, Broadmoore, Brookhaven, Avondale, Brown and Watts Additions.

The twin cities of Texarkana, Arkansas-Texas, serving a four-state area and popularly referred to as the Gateway to the Southwest, have a combined population of approximately 100,000. Widely known as a manufacturing, shipping, transportation, and railroad center, Texarkana is also noted for its lumber and dairy products. Located near the city is the U. S. Army Lone Star Ordinance Plant and Red River Army Depot, second largest arsenal in the nation.

Texarkana is also noted for its outstanding public school systems and churches. Recreationally, the Texarkana area is a sportsman's paradise with some of the nation's best hunting and fishing in the immediate area.

Campus and Buildings

The campus of Texarkana Community College in 1977 consists of eighty-eight beautifully landscaped acres. Buildings on the campus include the following:

Administration Building — containing all administrative offices, the Computer Center and numerous classrooms, mostly relating to business and law enforcement instruction.

The Palmer Memorial Library — opened in July, 1971, this beautiful facility houses over 38,000 volumes, holds subscriptions to five daily newspapers, and more than 325 current periodicals. Nonprint materials, such as microfilm, microfish and records are also available. The library is officially designated as a depository for U.S. government documents. Special features of the library are the Learning Resource Center and the Individual Learning Center. Closed circuit television programs, slides, tapes and film loops are

among the media available to the students for use at the Learning Resource Center. Individual carrels equipped with both audio and video equipment are available to facilitate individualized instruction. In addition, closed circuit television production, graphics and audio duplication are among the services of the LRC which are provided for the faculty to improve instruction.

Classroom Building — strictly what the name implies, the classroom building houses twelve large multi-use classrooms and offices housing many academic disciplines and including faculty offices.

The Texarkana College Student Center — opened in January, 1959 the Student Center houses a large lounge and ballroom, a food service area, bookstore, recreation rooms, post office, reading rooms and the Counseling Center.

Music Building — the music building contains two large rehearsal halls for the band, choir and smaller ensembles, one multipurpose classroom, one class piano room, individual rooms for students and studio offices for the music faculty.

Agriculture Science Building — this building contains classrooms and laboratories for the agricultural instructional program as well as other classes. In 1975 the college received a gift of 360 acres of land on the Red River Army Depot reservation and a college farm was established on this property. In 1976 the Farm and Ranch Management Program was begun.

College Farm and Ranch: The Texarkana Community College Farm and Ranch is located twelve miles from the main campus on Texas Farm Road 991. The 360 acre facility is the site for laboratory instruction and demonstration in the Agriculture and Farm and Ranch Management programs. Buildings located on the farm include a classroom-laboratory, farm and ranch manager's residence, beef center, agricultural mechanics laboratory, a farm shop, a three-building swine center and a poultry center. The Commercial Truck Driver training area is also located on the property. Improved and native pastures, agronomy and horticulture field plots, and woodland areas comprise the farm and ranch. The College maintains herds or flocks of beef cattle, swine, sheep, and poultry for instructional purposes.

Art Building — the art building is the former boys' dormitory housed in the upstairs north wing of the building. The building has several rooms for painting and drawing, a ceramics room, weaving room, a display gallery and faculty and studio offices.

Language Arts Building — the language arts building contains four classrooms, eight faculty offices, English, speech and drama are taught in this building. In addition, the student publications offices are located here.

Vocational-Technical Building — the vocational-technical building includes 33,000 square feet and is located on the north corner of College Drive and Coolidge Street. This building houses programs of office occupations,

auto mechanics, auto body repair, refrigeration mechanics, related basic education, printing, and mid-management, electronic technology, child care training and welding. The building contains multi-purpose classrooms for related courses. This facility is among the finest and most up-to-date of its kind to be found anywhere and is equally equipped.

Athletic Facilities — the gymnasium houses facilities for basketball, volleyball, badminton, weight training and gymanastics. In 1970 a modern aquatic center was built with an olympic size pool consisting of six fifty-meter lanes, ten twenty-five yard lanes, one three-meter board, and two one-meter boards. An eight court tennis complex with championship lighting and pelxipave surface is located directly behind the Aquatic Center.

The Stilwell Humanities Building — this structure, the newest on the campus, includes 49,000 square feet. This ultra-modern structure houses the College's drama, art, music, and English departments and includes a small auditorium for recitals and productions, as well as a number of faculty offices.

The A. M. and Wilma Aiken Instructional Systems Center — this new structure, which houses the facilities of East Texas State University at Texarkana, includes 52,500 square feet. It contains classrooms, a learning resource center, administrative offices, conference areas, a television studio, a graphics center, and storage areas. This building was completed early in 1978.

Philosophy and Objectives

Texarkana Community College is committed to providing every person in the Texarkana community and surrounding area a quality educational experience whether the person is a youth setting forth toward a degree in medicine or an adult wanting to enrich his leisure hours with an interesting hobby. There is a place for the student who wishes to spend a year or two preparing himself to enter a trade or profession, and a place for an employed person who wants to further his training in his occupational field. There is a place for the very bright high school student who is ready to undertake college level training in advance of his graduation from secondary school, and a place for the high school dropout who has changed his mind about the necessity of education in today's complex, demanding society. There is, simply stated, a place for everyone. Texarkana Junior College officially changed its name to Texarkana Community College in 1972 when its philosophy, function, and breadth outgrew the traditional junior college label. The new name more closely states the college's mission — to meet the diverse educational needs of the entire community. And how can the college serve all of the diversity of needs demanded in our community? The answer is found in educational offerings in four broad categories:

For the student seeking the first two years of work toward the goal of a bachelor's or higher degree the college offers a wide range of courses which are transferable to senior colleges and universities.

For the student wishing to enter an occupation at a level above the bottom rung of the ladder the college offers programs from six weeks to two years, covering specific technical/occupational fields.

For the employed person wishing to improve his knowledge in his field or train for a move into a new occupational field — the college offers a broad range of credit and non-credit adult education courses.

For the person who simply wants to make life a little more interesting there are community service programs, offering a myriad of subjects on cultural, civic and vocational topics.

This is what a totally comprehensive community college is all about and how it differs from the old junior college concept. Today Texarkana Community College is a truly comprehensive community college with an educational place for everyone.

REQUIREMENTS FOR ADMISSION

It is the policy of Texarkana Community College to admit students without regard to race, color, sex, or national origin.

Methods of Admission

A person may be admitted to Texarkana Community College by any one of the following methods:

1. High School Graduates.
2. Individuals with General Educational Development (GED) Certificates.
3. Individual Approval — Any person 18 years of age or older, may at the discretion of the college, be admitted.
4. Early Admission — A high school student, after completion of the 11th grade and with the consent of his parents, may be recommended by the high school principal for admission.
5. Transfer Students — Texarkana Community College welcomes transfer students. Students on disciplinary dismissal will not be admitted. Students on academic dismissal from another college may be admitted provided they live in the Texarkana Community College district.
6. Admission of Foreign Students — The College encourages the enrollment of foreign students who satisfy regular entrance requirements and have proficiency in the use of the English language.

   Applicants who are natives of non-English speaking countries are required to provide evidence of proficiency in the English language by scoring at least 450 on the Test of English as a Foreign Language (TOEFL). Residents of foreign countries are urged to contact an American Embassy or Consulate for the administration of this examination.

General Requirements for Admission

1. Completed application for admission.
2. Provide an official transcript from the last school attended or GED certificate.
3. Provide evidence of immunization as required by state law: diphtheria-tetanus, polio if under age 19.

4. Furnish scores from the ACT or SAT test. (Does not apply to transfer students). Note: Students scoring below a standard score of 16 on the English section of the ACT or below 350 on the Verbal section of the SAT, are required to take English 031 for background enrichment and communication skills. Students who do not have ACT or SAT scores are required to take the English placement exam.

Special Admission Requirements

Texarkana Community College reserves the right to require additional information for admission to certain programs. Some examples are: Associate Degree Nursing, Vocational Nursing, Flight Technology, and Truck Driving. The specific requirements can be found with the individual programs in this catalog.

There are also certain programs offered at Texarkana Community College to which the General Admission Requirements Number 2 and 4 do not apply. Specifically, ACT or SAT scores and transcripts or GED Certificates are not required. Some examples of these programs are: Air Conditioning/ Refrigeration, Auto Body Repair, Auto Mechanics, Electronics, Small Engine Repair, Truck Driving, and Welding.

Required Physical Education

Full-time students (those enrolling in 12 or more semester hours) are required to be enrolled in a physical education activity class each semester that they are in attendance at Texarkana Community College. Some students may be eligible for exemption by meeting one of the following criteria:

Furnish a health certificate indicating physical impairment. The certificate must be signed by a physician.

Furnish a transcript indicating they have completed 4 physical education activity courses.

Are a veteran with active duty in the U.S. Armed Forces and furnish proof from the Veterans Administration.

Are admitted in an occupational program in which P.E. is not required for an Associate of Applied Science Degree.

Required Freshman Orientation

Beginning freshman enrolled in 12 or more semester hours are required to take Psychology 111, Freshman Orientation. Any exceptions must be approved by a counselor.

Required English

All beginning students enrolled in 12 or more hours are required to take an English course. The criteria for determining which English course the student must take are stated in the general requirements for admission to TCC.

REQUIREMENTS FOR GRADUATION

Texarkana Community College confers four associate degrees: the Associate in Arts Degree, the Associate in Business Administration Degree, the Associate in Science Degree, and the Associate in Applied Sciences Degree. The Associate in Arts Degree, the Associate in Business Administration Degree, and the Associate in Science Degree are awarded upon successful completion of a two-year college/university transfer program. The Associate in Applied Sciences is awarded for successful completion of a two-year vocational-technical program. In addition, Texarkana Community College awards Certificate of Graduation for completion of programs of less than two years in length.

A. **General Requirements** (Common to the Associate in Arts, Business, Science, and Secretarial Science degrees.)

1. A minimum of 64 semester hours are required for graduation. (Veterans are exempted from P. E.)
2. 18 hours must be of sophomore standing.
3. A maximum of 14 hours of credit by exam may be accepted.
4. A maximum of nine (9) hours of correspondence study may be accepted. (Additional hours may be accepted upon the approval of the Dean of Instruction and the Director of Admissions).
5. The last 15 hours must be completed in residence.
6. A cumulative grade point average of 2.0 is required for graduation.
7. Students must make formal application for graduation by March 1, on the form furnished by the Admissions Office.

B. **Requirement for Degrees**

1. **Associate in Arts**

   a. 12 hours of English—English 131, 132, and six hours of sophomore literature (English 031 or any speech course may substitute for three hours of literature).

      Note: English 031 is not accepted as transfer credit by most senior colleges.

   b. Six (6) hours of History—History 133, 134.

   c. Six (6) hours of Political Science—PSI 231, 232.

   d. Four (4) hours of P. E.—Four activity courses.

   e. 18 additional semester hours of courses to be selected from Mathematics, Foreign Language, Fine Arts, Humanities, and/or Social Sciences.

2. **Associate in Science**

   a. 12 hours of English—English 131, 132, and six hours of sophomore literature (English 031 or any speech course may be substituted for three hours of literature). Note: English 031 is not accepted as transfer credit by most senior colleges.

   b. Six (6) hours of History—History 133, 134.

   c. Six (6) hours of Political Science- PSI 231, 232.

   d. Four (4) hours of P. E.—Four activity courses.

   e. 18 additional semester hours of courses to be selected from Mathematics and Natural Sciences.

3. **Associate in Business Administration**

   a. 12 hours of English—English 131, 132, and six hours of sophomore literature (English 031 or any speech course may be substituted for three hours of literature). Note: English 031 is not accepted as transfer credit by most senior colleges.

   b. Six (6) hours of History—History 133, 134.

   c. Six (6) hours of Political Science—PSI 231, 232.

   d. Four (4) hours of P. E.—Four activity courses.

   e. 18 hours of Business

4. **Associate in Secretarial Science**

   a. 12 hours of English—English 131, 132, and six hours of sophomore literature (English 031 or any speech course may be substituted for three hours of literature). Note: English 031 is not accepted as transfer credit by most senior colleges.

   b. Six (6) hours of History—History 133, 134.

   c. Six (6) hours of Political Science—PSI 231, 232.

   d. Four (4) hours of P. E.—Four activity courses.

   e. 18 hours of Secretarial Science

5. **Associates in Applied Science**

   Successful completion of the prescribed curriculum in a particular vocational-technical program.

6. **Certificates of Graduation** — Texarkana Community College awards certificates of graduation to individuals completing programs which are designed for training in a particular skill. These programs include:

   Air Conditioning/Refrigeration
   Auto Body Repair
   Auto Mechanics
   Computer Programmer/Operator
   Electronics (Radio & TV Repair)
   Heavy Equipment Mechanics
   Industrial Electricity
   Small Engine Repair
   Commercial Truck Driving
   Vocational Nursing
   Welding

See the program of your choice in this catalog for the curriculum content.

CREDIT BY EXAMINATION

Texarkana Community College awards up to fourteen (14) hours of credit by examination. This credit may be earned through either the CLEP Subject Exams and/or locally contructed exams. Credit for CLEP General Exams will be considered on an individual basis. The CLEP Subject Exams are recommended for students desiring credit from Texarkana Community College.

Students requesting CLEP credit should have their scores reported to the Admissions Office.

A student may receive credit by examination in the following courses:

Air Technology
Accounting
Algebra
Biology
Business Law
Data Processing
Chemistry
Economics
English
French
Geography
Government
History
Police Technology
Nursing
Psychology
Sociology
Spanish
Trigonometry

Additional information is available from the Counseling Center.

CORRESPONDENCE CREDIT

Nine semester hours is the maximum allowed at Texarkana Community College, in addition to the hours (14) allowed by Credit by Examination. Any deviation from this policy must be individually approved by the Dean of Instruction and the Director of Admissions.

SCHOLASTIC PROBATION AND SUSPENSION

A student must maintain a satisfactory level of academic achievement in order to remain enrolled in good standing at Texarkana Community College. This level of academic achievement is determined on the basis of each student's cumulative grade point average, calculated on the basis of all academic work attempted.

To be eligible for continued enrollment in good standing, a student must maintain a minimum grade point average as follows:

On 30 semester hours attempted or less, a student must have a cumulative grade point average of not less than 1.50.

On 31 semester hours or more attempted, a student must have a cumulative grade point average of not less than 2.00.

A 2.00 cumulative grade point average is required for graduation.

Any student failing to maintain the minimum academic requirements will be placed on academic probation. A student on academic probation will remain subject to the requirements of probation until that student has raised his/her cumulative grade point average to the level of satisfactory progress as specified above. A student who does not meet the level of satisfactory progress as specified above may continue on a probationary status provided that student has compiled at least a 2.00 grade point average for the previous semester.

Should the student fail to meet the above requirements, he/she will be placed on academic suspension for one semester. Any student placed on suspension may appeal to the Director of Admissions for special consideration.

RULES AND REGULATIONS

Change of Classes

A student making a change in his class schedule after completion of his registration will follow this procedure.

1. Obtain proper forms from Admissions Office.

2. Present forms to the Dean for approval.

A fee of $5.00 is charged for each schedule change after registration fees are paid.

Dropping of Classes

Any student who officially withdraws from a course two weeks before the start of final examinations and before the student has been dropped from the course by the instructor will receive a "W."

Students are expected to attend regularly all classes in the courses for which they are registered. Responsibility for work missed because of illness, school business, or other circumstances is placed on the student. Poor class attendance may result in the student's being dropped from the course or courses with a failing grade of "F" at the discretion of the instructor.

Absentee Policy

Effective December 1, 1975, for the clock hour programs and the beginning of the semester 1976, for the credit hour programs the following absentee policy will be in effect:

Under this policy: the following number of absentees would be the maximum allowable:

Semester-Hour programs:	
MWF Classes	6 (per semester)
T TH Classes	4 (per semester)
Night classes (which meet once per week)	2 (per semester)
Clock-Hour Programs:	
Full-time	7 (per quarter)
One-half time	4 (per quarter)

A student's absence due to school trips and/or business would not be counted against the allowable number. Three tardies constitute one absence.

Assemblies

At the discretion of the Administration special assemblies will be announced. These assemblies will present programs of broad interest or of cultural value.

General Academic Regulations

The unit for counting credits is the semester hour. A semester hour is defined as one hour of class work a week or its equivalent in laboratory pursued for one semester.

The following grades are used in evaluating the student's work: A, B, C, D, F, I, and W. A, B, C and D are passing grades; F is failure. The grade (I) indicating incomplete work, or absence from examination by excuse, must be made up by mid-term of the next semester; otherwise, the incomplete (I) becomes an F.

The value of each grade in grade points is as follows: A-4; B-3; C-2; D-1; F-0 per semester hour.

The normal load for full time students is five courses (15 to 18 hours academic work). Except by special permission of the Dean, students will not be permitted to take more than this normal load. Prior approval of the Dean of Instruction may be requested if a day division student desires to enroll in six academic courses. The student must have maintained a grade point average of 3.0 and must have enrolled for at least 12 semester hours in the preceding semester. Permission to carry four courses in the Continuing Education Division will be granted for one semester if the student enrolled for seven or more semester hours work in the preceding semester in the Continuing Education Division. The student must have made a grade point average of 3.0 or better. Students holding jobs outside of their college work should not register for a full time academic load. The amount of college work permitted must be approved in relation to the job time requirement by the Dean. Registration for more than nine semester hours on a three day schedule must be approved by the Dean.

Reports

Reports on the work of students will be issued at the end of the semester.

Examinations

The examinations given consist of regular and special examinations. Regular examinations are given at the end of each semester according to a schedule determined by the Dean of Instruction. These examinations are taken by all students. There are no exceptions.

Examinations given during the semester are to be scheduled at the discretion of the instructor, preferably on the completion of a unit of work. These should be given frequently enough so that a check of progress may be made and the student given the experience of evaluating the work covered.

Special examinations are those given to students to remove conditions on subjects when the condition was caused by time lost due to illness or some other emergency. In order to be permitted to take a special examination the student must secure the approval of the Dean and the teacher of the course.

Conduct

Students of Texarkana College are expected to obey the laws of the land, the regulations of the College, and to act in keeping with the accepted customs of society.

While the administration and discipline committee cannot assume full responsibility for students when they are not on campus, the College reserves the right to dismiss a student whose conduct is deemed improper or is detrimental to the welfare of the college community.

There are three general campus regulations:

1. There will be no smoking in the classrooms or in the library.
2. The consumption or possession of alcoholic beverages and/or unlawful drugs is strictly forbidden on campus.
3. Gambling, use of profane language, and on-campus possession of firearms are not permitted.

It is the responsibility of the student to become familiar with the "Standards of Student Conduct" set forth in the current TCC Student Handbook.

Scholastic Honors

Students enrolled for 12 semester hours or more who make not less than a 3.8 grade point average are placed on the President's List. Those with a grade point average of not less than a 3.2 are placed on the Dean's List.

The College awards to graduates with the Associate of Arts Diploma, Associate of Science Diploma, Associate in Applied Science, or Associate of Business Diploma, distinction for excellence in scholarship as follows:

1. Diplomas with High Honor to all students having not less than a 3.8 grade point average on all their college work.

2. Diplomas with Honor to all students having not less than a 3.2 grade point average on all of their college work.

STUDENT ACTIVITIES

Texarkana College encourages and fosters worthwhile student activities under the direction of competent faculty advisors. This is one in the belief that students should experience the opportunity to realize their aspirations and cultivate their interests in popular lines of endeavor outside the classroom.

A general calendar for all student functions will be made up in consultation with the faculty committee on student interests, activities, and organizations. No student activity will be approved later than two weeks prior to the date on which the activity is to be held. The Student Senate and the Dean of Students maintain the college activity calendar. All club and student organization activities are cleared through the Office of the Dean of Students for date of specific functions.

All funds for every organization must be deposited in and disbursed from a central student activity account. Disbursement will be made on the presentation of properly executed vouchers.

The expense of social affairs given by various clubs must be paid by the organization sponsoring the function.

The Student Senate

The Student Senate of Texarkana College is composed of a president, vice-president, treasurer, and five sophomore senators and five freshman senators.

The Student Senate is a service organization which assumes leadership promoting worthwhile student enterprises. It also serves as an advisory organization representing the student body in its relations with the faculty and administration. Students who are elected to serve on the Student Senate receive valuable training and experience in civic leadership.

The Student Senate is sponsored by the Dean of Students.

STUDENT SERVICES

Counseling

Texarkana Community College's staff of professional counselors are available to devote personal attention to everyone in the college community. Counseling Center hours are 8:00 a.m.to 5:00 p.m. Monday through Friday and 6:00 p.m.to 9:00 p.m. Monday through Thursday. Appointments may be made by calling 838-4541, Extension 249, or by stopping by the Counseling Center, Room 110 in the Student Center.

Special services include:

1. Career counseling regarding vocational choice, occupational information, self-appraisal of interests, aptitudes, and abilities.
2. Academic advisement regarding appropriate choices of courses, educational plans, study skills, and transferability of courses.
3. Confidential personal counseling regarding adjustment and life decisions.
4. Standardized testing to provide additional information about interests, aptitudes, and abilities needed in planning and making decisions.
5. A placement office in which students may obtain needed employment information on off-campus employment.

Testing

1. The General Education Development Tests (GED) are administered in the Counseling Center at TCC. The test scores are generally recognized by employers and colleges as the equivalent of a high school education. Individuals interested in taking the test should contact the Counseling Center.

2. Texarkana Community College is a national test center for the American College Test (ACT) and the College Entrance Examination Board. These tests are administered on national test dates throughout the year. Registration packets may be obtained in the Counseling Center.

3. TCC is an open test center for the College Level Examination Program (CLEP). Registration guides and information pertaining to CLEP are available in the Counseling Center.

CLUBS AND ORGANIZATIONS

Blue Jackets

A service organization for young women who are chosen on the basis of scholarship, leadership, and service. The membership is limited. This is a young woman's civic organization which makes an unusual contribution toward the enrichment of college life.

Phi Theta Kappa

National Junior College Honorary Scholastic Society which has as its aims the promotion of scholarship, the development of character, and the cultivation of fellowship among the students. To be eligible for active membership, a student must be of good character and must possess recognized qualities of citizenship as judged by a faculty committee. At the time of election the student must be within the upper ten per cent of the regularly enrolled student body.

The French Club

Students who have completed Elementary French are invited to join Le Cercle Francais, a chapter of the International Federation of French Alliances.

Los Conquistadores

The Spanish club is for students interested in a better understanding of the Spanish language and the people who speak it.

Professional Nurses Club

An organization for professional nursing students. Its purpose is to foster interest in the nursing profession. The Professional Nurses Club is affiliated with the Texas Nursing Students Association and the National Student Nurses Association.

Texarkana College Players

The purpose of this organization shall be to promote interest and participation in theatre activities among the student body; to provide quality entertainment for members, the student body, and the community; and to uphold the ethical and scholastic standards of educational theatre. Any student in good scholastic standing may be a member of the players.

Rodeo Club

An organization of students whose membership is open to anyone interested in the sport of rodeo. The purpose is to encourage active interest and participation in this competitive sport. The club sponsors rodeos during the fall and spring semesters.

Vocational Nurses Club

An organization for the vocational nursing student. This organization is to develop individual qualities of leadership, tolerance and objectivity, and to stimulate interest in participation in Vocational Nursing organizations.

Music Educators National Conference (MENC)

The MENC club is for any student enrolled in a music education course. The club is nationally known for its encouragement of cultural events, in the field of music. Several area trips are made by the members each year to hear and see some of the better known international music artists.

Agricultural Science Club

The purpose of the Agricultural Science Club is to promote interest in agriculture and broaden the educational activities of the agricultural student. Membership in the club is open to any student actively enrolled in Texarkana College and having an interest in agriculture.

Chess Club

An organization devoted to giving those who play chess an opportunity to enjoy their hobby.

Phi Beta Lambda

An organization open to students interested in a business oriented career. Membership is through invitation. Prospective members should be majors or minors in a business related field and should have an excellent academic record.

Political Organizations

The following political organizations are active on the campus: The Young Democrats and The Young Republicans.

STUDENT PUBLICATIONS

The TCC Campus News

The TCC News is the college newspaper published by and for the students. Students who are interested in journalism find the opportunity to serve on the staff of the TCC Campus News is a real chance for the development of leadership.

TCC Yearbook

The TCC Yearbook is the college yearbook presenting a pictorial review of the year's activities. This publication gives opportunity of application in many fields of student interest. Experience in advertising is provided as well as in editorial and art work.

Kaleidoscope

Kaleidoscope is the college magazine which is published each semester by the students of the Journalism Department in coordination with the English and Art Departments.

ATHLETICS AND SPORTS

Texarkana Community College sponsors programs in athletics, intramurals and recreational activities to meet the social and physical needs of students.

The intramural program offers a variety of facilities and activities for students who desire to participate in them.

For those students who wish to compete on an intercollegiate level in athletics, golf is available.

STUDENT SERVICE FEE

All students attending Texarkana Community College are assessed a Student Service Fee. Those students enrolled in semester hour courses are charged fifty (50) cents per semester hour up to a maximum of $7.00 per semester. Students enrolled in clock hour programs are charged the equivalent of $1.75 per quarter for part-time students, and $3.50 per quarter for full-time students. This fee entitles students to attend all college sponsored activities, to vote in campus elections, to receive the student newspaper, and free use of the college pool and tennis courts.

Those students who pay the maximum amount of $14.00 per semester for both the fall and spring semesters will qualify to receive the college yearbook.

FEES

Laboratory and equipment use fees shall be charged each semester as follows:

Laboratory

Art 238	$10.00
Art 239	10.00
Biology—for each course	7.00
Chemistry—for each course	3.00
Computer Science—for each course	8.00
Data Processing—for each course	8.00
Nursing	5.00
Office Machines—for each course	5.00
Typing—for each course	2.50
Physics—for each course	3.00
Physical Science—for each course	3.00
Law Enforcement—LEA 241 (Firearms)	10.00
Printing—for each course	5.00
Agriculture—for each course	5.00
Student Service Fee	7.00
I.D. Card Fee	1.00
Graduation Fee	10.00
Car Sticker	5.00
Late Registration Fee	5.00
Schedule Change	5.00
Extension Fee	3.00
Individualized Fee	5.00
Welding (full-time)	30.00
(part-time)	15.00
Liability Insurance (Fall semester Nursing/EMP-A)	8.50

Physical Education Fees

Regular P.E.	$2.00
Swimming	5.00
Scuba Diving	10.00
Bowling	16.00
Advanced Golf	15.00

Music Fees (for private music)

One 30-minute lesson per week, one hour credit	$37.50
Two 30 minute lessons, or one hour lesson per week, 2 hours credit	75.00

Air Technology (Regular Tuition & Fees)

Cessna 150	$14 per hour solo—$17 per hour dual
Mooney	$25 per hour solo—$28 per hour dual
Cessna 172	$20 per hour solo—$23 per hour dual
Twin Engine	$75 per hour
Flightmatic Simulator	$7 per hour—$10 per hour dual

Air Technology students will be required to deposit $150.00 and sign a Student Contract of Responsibilities and Waiver of Liability at the College Business Office before being permitted to fly any Texarkana College plane.

TUITION

The school year is divided into two semesters of 16 weeks each and two summer sessions. The students are charged accordingly for all fees. Tuition must be paid in full at the time a student registers. No student will be allowed to register after the sixth class day.

SCHEDULE OF GENERAL CHARGES FOR ALL STUDENTS EACH SEMESTER

The charges as listed cover tuition for the number of semester hours indicated. These are due and payable upon registration.

Residency either IN-DISTRICT or IN-STATE is defined to be living within the district or state for the twelve months period immediately preceding the date of registration.

TEXARKANA COLLEGE SCHEDULE OF TUITION AND FEES

Hrs.	In-District Students	Out-of-Dist. Students	Out-of-State Students	Out-of-Country Students
3	$ 38.00	$ 47.00	$ 71.00	$133.00
4	44.00	56.00	88.00	179.00
5	50.00	65.00	111.50	225.00
6	56.00	74.00	134.00	271.00
7	65.00	86.00	156.50	317.00
8	75.00	99.00	179.50	363.00
9	85.00	112.00	202.00	409.00
10	95.00	125.00	224.50	455.00
11	105.00	138.00	247.50	501.00
12	115.00	151.00	267.00	547.00
13	120.00	159.00	268.00	588.00
14	125.00	167.00	269.00	629.00
15	130.00	175.00	270.00	670.00
16	135.00	183.00	271.00	711.00
17	140.00	191.00	272.00	752.00
18	145.00	199.00	273.00	793.00
19	150.00	207.00	274.00	834.00
20	155.00	215.00	275.00	875.00

CLOCK HOUR PROGRAMS

	In-District	Out-of-District	Out-of-State
Full-time	$75.00 per quarter	$100 per quarter	$150 per quarter
Half-time	$37.50 per quarter	$ 50 per quarter	$ 75 per quarter

PROFESSIONAL NURSING STUDENTS ONLY

Hrs.	In-District Students	Out-of-Dist. Students	Out-of-State Students	Out-of-Country Students
3	$ 38.00	$ 47.00	$ 71.00	$213.00
4	44.00	56.00	88.00	219.00
5	50.00	65.00	111.50	225.00
6	56.00	74.00	134.00	231.00
7	65.00	86.00	156.50	237.00
8	75.00	99.00	179.50	243.00
9	85.00	112.00	202.00	249.00
10	95.00	125.00	224.50	255.00
11	105.00	138.00	247.50	261.00
12	115.00	151.00	267.00	267.00
13	118.00	157.00	268.00	268.00
14	119.00	161.00	269.00	269.00
15	120.00	165.00	270.00	280.00
16	121.00	169.00	271.00	295.00
17	122.00	173.00	272.00	310.00

NLN Exams (ADN Nursing Students) 9.00
Bus Service to Little Rock, Ark. (Clinical Lab) $50.00

LVN Students Only

Students should expect to spend approximately $400.00. Tuition, fees and books are payable at the beginning of the program.

Tuition	$150.00
Lab Fee	25.00
Activity Fee	14.00
Liability Insurance Fee	8.50
Graduation Fee	3.75 (payable before graduation)
Graduation Lamp	3.50 (payable before graduation)
Books (Approx.)	100.00 ($50 payable in 4 months)
Uniform (Approx.)	75.00
NLN Exams	3.00
Total	$382.75-All due first day except $57.25

OTHER COSTS:

1. White shoes & hose, and a watch with a second hand may be purchased wherever the student chooses.
2. Graduation uniform, white.

3. Graduation patch and cap—Approximately $2.80, due 1 month before graduation.
4. School pin after graduation, $8.25—Optional.

Policy Concerning Refunds

Upon presentation to the Business Office of an official record from the Admissions Office showing withdrawal from a course during fall and spring semesters from Texarkana Community College, a refund will be made as follows: (1) 100% during the first week; (b) 50% during the second week; (c) none during the third week and thereafter.

Summer refunds are made according to the following schedule: (a) 100% on the second day; (b) 50% on the fourth day. Night class refund schedule is as follows: 100% the first night; (b) 50% the second night. After the fourth day class and second night class no refund will be made.

An immediate refund will not be made to a student who withdraws after the payment of his fees; but upon request a check covering all refunds due will be mailed to the address left with the Director of Admissions.

A student who enters the spring semester not knowing his fall semester grades and is required to withdraw because of failure in the work of the fall semester will have all his registration and tuition fee for the spring semester refunded.

Returned Checks

There will be a fee of $10 for all returned checks.

Reinbursement for returned checks shall be made with cash or money order only. Students failing to make payment or exercise their due process rights within fifteen days after being notified by the Business Office, shall be dropped from all classes, official records will be restricted, and prosecution will be initiated.

Students attempting to drop courses by stopping payment on their checks instead of initiating approved drop procedures through the Admissions Office shall be subject to the normal returned check penalties.

Vehicles

Everyone who operates a vehicle on campus must have a valid drivers license and be in compliance with the state law with regards to liability insurance.

Debts

Anyone owing a debt to the college may be dropped from class and records withheld until the debt is paid.

Audit Policy

Individuals may audit courses for which there is a charge of $25.00. There are some courses which a student may not audit. For information concerning these courses, a person should contact the Office of Admissions.

Exemptions of Veterans

Men and women who are citizens of Texas, who were residents of Texas at the time of induction, and who served in the armed forces and were honorably discharged therefrom (except certain limitations for age, personal requests, and period of service) and who are not eligible for educational benefits provided for veterans by the U.S. Government, are exempted from certain required fees but not for deposits, course fees, and certain fees fixed for all students. To obtain this exemption a photostatic or certified copy of the discharge papers and a notarized statement by the veterans that all benefits have expired must be presented to the Business Office at registration.

LATE REGISTRATION FEE

A late registration fee of $5.00 will be charged all students who enroll after the last designated day of any semester.

FINANCIAL ASSISTANCE

Employment

The college will attempt to find part-time work for those students who wish to work for a part of their college expense. Everything possible will be done to assist worthy students in finding such work. A Student Placement Service, administered by the Counseling Center, is maintained for the primary purpose of helping students secure part-time employment. This service also includes personal interviews, the maintenance of personal records, and the list of job opportunities.

Instructions to Applicants for Financial Assistance

This is to inform you of the various programs of financial assistance available at Texarkana Community College and the procedure for obtaining financial aid.

Types of Financial Aid

1. National Direct Student Loan Program
2. Nursing Loan Fund
3. Guaranteed Insured Loan Program
4. Work-Study Program
5. Arkansas Rural Endowment Loan Program
6. Nursing Scholarship Program
7. Law Enforcement Grant Program
8. Basic Educational Opportunity Grant

Scholarships

1. Academic
2. Nursing
3. Divisional
4. First Honor Graduate
5. Texas Tuition

Steps to take in obtaining Loans and Scholarships

1. Before a student can be considered for any specific program, an ACT Family Financial Statement must be completed by the student and approved by his parent, guardian, or spouse. (May be obtained from high school counselor of Financial Aid Office).

2. Complete a request for financial aid form. (Financial Aid Office)

3. When the ACT Analysis is received in the Financial Aid Office a need analysis is made and the student informed of approval or disapproval of the aid requested.

4. Since aid is awarded only to students who satisfactorily complete the requirements for admission to the college, it is necessary that beginning students have the following items on the file in the Admissions Office.

(a) Admission Application
(b) High School Transcript showing rank in class
(c) Entrance Examination Scores
(d) College Transcript (If transfer student.)
(e) Health Certificate

Applications Deadline

Applications must be submitted at least six weeks prior to time of need.

SHORT TERM LOANS

The Dr. Dudley David Connor Loan Fund provides short term emergency loans to students. The amount loaned will not exceed $50.00, and the loan will be made at three percent interest for not more than 90 days. Application for this loan should be made in the Office of the Dean of Students.

The Downtown Texarkana Rotary Club operates a low interest student loan fund which may provide financial aid for education. In order to apply for a loan from the Downtown Rotary Club the applicant should contact the chairman of the Student Loan Committee, P.O. Box 1341, Texarkana, Texas 75501. The student will be interviewed and the application presented to the committee for approval.

The Katherine McCartney Hibbits Memorial Fund provides a limited number of short-term loans to students majoring in a music-related field. These loans must be repaid within the semester for which they are awarded, and recipients must be recommended by the Chairman of the Humanities Division. Application blanks are available in the Office of the Dean of Students.

Scholarships

Scholarships which are good for one regular session are awarded by Texarkana Community College to the first honor graduate of affiliated high schools.

The Altrusa Club of Texarkana grants each year a two-year scholarship to an outstanding student from both the Texas Senior High and Arkansas Senior High School.

The Atlanta Rotary Club provides a scholarship for an outstanding graduate of the Atlanta High School. The award is made on the recommendations of the high school and the regulations as set up by the club.

Dr. C. P. Klein provides scholarships for two students studying X-ray Technology.

The Bowie-Miller Medical Auxiliary awardsd an annual scholarship. The wives of local physicians select a student of the William Buchanan Department of Nursing, associate degree program, on the basis of financial need and success in studies.

Each year the Downtown Texarkana Rotary Club, provides a scholarship for a student from Texarkana Arkansas High School, Texarkana Texas High School, Liberty-Eyalau High School, and a student from Texarkana Community College. These awards are made on the recommendations of the respective schools in compliance with the regulations set up by the club.

The Rho Chapter of Alpha Delta Kappa Sorority provides a scholarship for a student who is a graduate of a Miller County high school.

The Texarkana Junto Club awards two scholarships, one to a student from the Texarkana Arkansas High School, and the other to a student from the Texarkana Texas High School. These students are selected by the faculties of the respective high schools.

The Southwestern Bell Telephone Company provides two scholarships for employees of the Comapny.

The DeKalb Lions Club has provided a scholarship for a graduate of the DeKalb High School majoring in business.

The American Business Women's Association of DeKalb provides a scholarship for a graduate of DeKalb High School majoring in business.

The Insurance Women of Texarkana provides a scholarship to a sophomore studying Business Administration under the guidelines established by the Insurance Women of Texarkana.

Texarkana Community College offers work scholarships to students enrolled in the college and and choir & keyboard classes. The amount of the work scholarship depends on need, talent and activities determined by the director of instrumental ensembles.

The Bruce Douglas Memorial Scholarship is awarded to one of the most outstanding students majoring in music. The award was established in memory of the outstanding musical and leadership abilities of the late Bruce Douglas, a student of TCC during 1969-70.

The Southern Clinic Scholarship is available to an entering student in the William Buchanan Department of Nursing, Associate Degree Program. The student is selected by the nursing faculty and Southern Clinic with major emphasis placed on academic standing, nursing ability, aptitudes, and financial need. The scholarship may pay tuition and fees for two semesters and may be reevaluated at the end of the second semester for an additional two semesters.

The Texas City Council of P.T.A. awards a scholarship to an outstanding graduate of the Texas Senior High School.

The Future Homemakers Club of the Texas Senior High School provides a partial scholarship for a Texas High School student majoring in homemaking.

The C. C. Burrus Memorial Scholarship is made available through donations from area hospitals and clinics. It is awarded to an entering freshman admitted to the college's degree nursing program on the basis of high school grades, American College Test scores, and need.

The Texarkana Business and Professional Women's Club awards a scholarship to a student who will be attending Texarkana College. The scholarship is awarded under guidelines established by the B & PW Club.

Twin Cities Kiwanis Club gives a $200 scholarship for the academic year to a Key Club member from Liberty-Eylau High School.

The Texarkana Community College Faculty Association awards a scholarship annually to a student selected on the basis of scholarship, character, and need. The scholarship is given in memory or in honor of a former member of the faculty.

A limited number of scholarships are awarded by each academic division of the college each year to students who have distinguished themselves in a particular area of study.

The Truman Arnold Business Scholarship provides five annual scholarships with a value of $250 per semester to students selected by the Business Administration faculty in conjunction with the Director of Student Financial Aid. Recipients must be majoring in a business-related field; must be in need of financial assistance; and must be superior students enrolled for at least 12 semester hours. Applications should be sent to the Director of Student Financial Aid.

Four States Nursing Home annually presents a $250 scholarship to a vocational nursing student who is ineed of financial assistance and who demonstrates the ability to successfully complete the 12 month program.

The Breakfast Optimist Club of Texarkana offers an annual scholarship with a value of up to $500.00 per academic year to a student selected on the basis of need and scholarship. The recipient must be a full-time student from the Texarkana area.

The Texarkana Community College President's Scholarships are awarded to ten area high school seniors who have demonstrated the qualities of scholarship, leadership, and participation in extra-curricular activities during their high school careers. These annual awards are for $250 per semester for both the fall and spring semesters. These scholarships are awarded on a competitive basis.

The Burnham Jones Memorial Scholarship is given annually to a sophomore student at Texarkana Community College who has demonstrated high qualities of citizenship and scholarship. It is given by the TCC Student Senate in recognition of the many years Mr. Jones served on the College Board of Trustees. The award is for $250 for the full academic year.

The Paul and Carmon McFerran Scholarship is presented annually to a sophomore student who has shown outstanding ability in the field of science and/or mathematics. This award is in the amount of $200 each academic year.

Financial Aid in Music—Financial aid is offered each year in band, choir, piano, organ, and instrumental music to students with both outstanding talent and financial need. Further information may be secured from the Chairman of the Music Department.

PRIZES AND AWARDS

The Rotary Club Good Citizen Award is presented to the student chosen by the faculty for outstanding citizenship qualities during the year.

The Hale Parker-Porter Akin Memorial Fund was established in 1963. The purpose of the fund is to foster excellence in scholarship. An award will be made to an outstanding graduate each year at the spring awards assembly.

The Wall Street Journal Award is given to an outstanding student majoring in business who has successfully completed the business requirements through the spring semester of his sophomore year.

The Outstanding Business Student Award is presented to a sophomore business student who has the potential to become a top business major and/or future businessman based on faculty evaluation.

The Lydia Lewis Holland Award is presented annually to an outstanding graduating student in the William Buchanan Department of Nursing, associate degree program. It was established by her daughter, Mrs. Jan Uyttalinda in honor of her mother, a long-time contributor to nursing in Texarkana.

REHABILITATION ASSISTANCE

The Texas Rehabilitation Commission offers assistance for tuition and required fees to students who have certain physical or emotional handicaps, provided the vocational objective selected by the handicapped person has been approved by an appropriate representative of the Commission. Through this State agency, other rehabilitation services are available to assist handicapped persons to become employable.

Application for this type of assistance should be made to the nearest Rehabilitation office. Inquiries may be addressed to: Commission, Texas Rehabilitation Commission, Medical Park Tower, 1301 West 38th Street, Austin, Texas, 79705.

EVENING AND CONTINUING EDUCATION DIVISION

The Continuing Education Division of Texarkana Community College extends officially the day college program of classes into the evening hours to enable both the youth and the adult to carry on a college program leading to an associate degree from Texarkana Community College or leading to transfer to a four-year institution. In addition, the program offers courses designed for the personal and occupational improvement of youth and adults.

The primary objective of Texarkana College Continuing Education Division is to serve the educational interests of the community and meet the needs of those who desire to continue their education.

Upon sufficient demand, courses offered regularly in the day school will be offered in the evening. The same standards regarding curriculum and instructors maintained by the day schedule will be maintained by the Evening and Continuing Education Division.

Areas available in the Continuing Education Division are College Courses, Vocational-Technical Courses (Local Credit), and Non-Credit Short Courses.

GENERAL INFORMATION

Entrance Requirements

Students registering for academic courses and requesting transferable credit must meet the same entrance requirements for such courses as day school students.

Registration

Students are expected to register on days designed for registration as stated on the Evening Schedule. All registration must be completed by the sixth class day. (Exception: Persons may register any time before class starting date for non-credit courses.)

Tuition and Fees

The tuition and fee charges for evening classes are the same as those stated in this catalog.

Class Hours

Ordinarily, classes meet one night per week for a period of three hours each night, except for those courses where laboratory time is required.

Schedule of Classes

A schedule listing the courses to be offered and general information pertaining to the Continuing Education Division is printed before each semester. A schedule will be mailed on request.

Dropping, Adding or Withdrawing

If a student finds it necessary to drop and/or add a course or withdraw from college, he must write or come personally to the Admissions Office. (Exception: persons dropping non-credit courses should contact the Continuing Education Office.)

Parking Regulations

The same parking regulations that are in effect during the day will be enforced at night. A campus security guard will be on duty each night enforcing these regulations. All students driving a vehicle on campus must obtain a parking permit.

Tuition Refunds

The financial regulations as stated in this catalog are to be followed by a student enrolled in the Evening School who desires a tuition refund.

Office of Evening and Continuing Education

The Continuing Education Division Office is located in the Administration Building—Room 320—Telephone 838-4541, ext. 276, 277, 382.

Office Hours

Spring and Fall Semester hours are from 8 a.m. to 9:30 p.m. Monday through Thursday; 8 a.m. to 5 p.m. on Friday. Hours vary for the Summer Session.

NON-CREDIT COURSES AND PROGRAMS

Non-credit courses may be organized for any length of time necessary and may be general in scope or directed toward a specific objective. They include discussion groups, technical training, hobby activities, and special interest groups and cover a wide range of subject matter and educational activity.

Tuition for non-credit courses is determined by the actual cost of conducting each course and as a result, the cost per course varies. However, in no case is it great enough to constitute a problem for anyone who is genuinely interested in further education.

There are no prescribed educational requirements for non-credit courses. Interested students who can profit from the instruction to be given will usually be approved. Some of the non-credit courses include:

Advanced Cardiac Life Support
Auto Paint and Body
Basic Bookkeeping
Basic Drawing
Beekeeping
Blueprint Reading
Bridge
Cardio Pulmonary Resuscitation (CPR)
Cake Decorating
Ceramics
Class Piano
Class Voice
Creative Writing
Disco Dancing
Dried & Silk Flower Arranging
Driver's Training
Emergency Department Nurses Seminar
EMT Refresher
Family Estate Planning
Family Finance
Federal Income Tax
Fire Academy
Genealogy
Gymnastics
Home Vegetable Gardening
Horse Management
Insurance Recorder
Interior Design
Interstate Commerce Law
Investment Information
Key Punch
Lady Know Your Car
Lamaze Method of Childbirth
Legal Secretary
Middle Eastern Dance
Nursing Home Training
Office Machines
Oil Painting
Poodle Grooming
Photography
Piano Preparatory
GED Preparatory
Strings Preparatory
Scuba Diving
Small Engine Repair
Supervisor Development
Soccer
Shorthand
Sign Language
Swimming for Women
Tennis
Transportation Rates
Transactional Analysis
Typing
Welding
Writing for Publication
Yoga

SENIOR CITIZEN PROGRAM

Texarkana Community College extends to the senior citizens of the community special privileges. At age 60 and over, the individual may each year apply for a special ID card to be made by the Continuing Education Office. The cost of this card will be $1 and the participant will receive the following privileges:

1. Use of library
2. Swimming pool privileges
3. Free counseling
4. Use of tennis courts
5. Same privileges as TCC students on attending college sponsored activities in the auditorium; such as concerts, plays, etc. These activities may be free of charge or with a discount.
6. Pay only one-half fee on most non-credit courses.
7. May audit any college credit course free of charge on a space available basis except certain courses which would not be eligible for audit. For further information contact the Continuing Education Office.

Proof of age will be required, such as a driver's license, birth certificate or any other positive identification.

When an ID card is made, parking stickers will be issued, free of charge. These stickers are good for one year.

PROGRAMS OF STUDY

AGRICULTURE

The Agriculture Department offers courses leading to the bachelor's degree in various fields of agriculture. Curricula for the first two years of study are designed for students majoring in animal science, agri-business, agricultural engineering, soils and crop science, forestry, food technology, pre-veterinary medicine, wildlife management, and general agriculture. Due to variations in degree requirements by degree-granting institutions and the availability of a number of options in a given major, students are encouraged to confer with their faculty adviser in developing a plan of study.

*GENERAL AGRICULTURE

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
AGR 131	3	AGR 132	3
AGR 141	4	AGR 143	4
HST 133	3	BIO 144	4
MTH 131	3	HST 134	3
Physical Education	1	ENG 132	3
PSY 111	1	Physical Education	1
ENG 131	3		
	18		18

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 141	4	BIO 243	4
English (Sophomore)	3	AGR 235	3
PSI 231	3	AGR 236	3
SPE 133	3	CHM 142	4
Physical Education	1	PSI 232	3
AGR 241	4	Physical Education	1
	18		18

*Students who plan to major in Agricultural Education should follow this curriculum.

AGRI-BUSINESS

FRESHMAN YEAR

1st Semester	Hours
AGR 131	3
AGR 141	4
BIO 143	4
ENG 131	3
MTH 131 or 133	3
Physical Education	1
PSY 111	1
	19

2nd Semester	Hours
AGR 132 or 235	3
AGR 143 or 236	3
BIO 144	4
ENG 132	3
HST 133	3
Physical Education	1
	18

SOPHOMORE YEAR

1st Semester	Hours
ACC 231 or ECO 231	3
MTH 230 or C.S. 231*	3
English (Sophomore)	3
CHM 141	4
PSI 231	3
Physical Education	1
	17

2nd Semester	Hours
ACC 232 or ECO 232	3
Elective	3-4
CHM 142	3
PSI 232	3
HST 134	3
Physical Education	1
	17-18

*Consult the catalog of the four year institution to which you intend to transfer.

AIR CONDITIONING/REFRIGERATION

The Air Conditioning/Refrigeration courses require six quarters or eighteen months for completion. The courses are one quarter in length and all are offered each quarter. The instruction is individualized and students in the same shop study different topics. Each course contains 360 hours of instruction with the ratio of lecture to laboratory adjusted as needed. Each student will be required to attend classes in related mathematics, communications, and small business management (60 hours per quarter)* during each quarter of enrollment. The student who is capable may test out of studies in some of the related areas. The courses in Air Conditioning/Refrigeration are:

1st Quarter

ACR 161 ..... 360 Clock Hours

2nd Quarter

ACR 162 ..... 360 Clock Hours

3rd Quarter

ACR 163 ..... 360 Clock Hours

4th Quarter

ACR 164 ..... 360 Clock Hours

5th Quarter

ACR 165 ..... 360 Clock Hours

6th Quarter

ACR 166 ..... 360 Clock Hours

*Students in Air Conditioning/Refrigeration will take Related Communications, Related Mathematics, Small Business Management, and Applied Drafting.

AIR TECHNOLOGY

Introduction

This program is designed to teach pilot and ground school certification courses. Certification and/or ratings may be obtained in the following areas; private, commercial, instrument, multi-engine, and in professional flight instructor certification. All courses are approved by the Federal Aviation Administration.

For the career minded student, Texarkana Community College offers the Associate Degree in Applied Science in Career Pilot Technology, or the non-degree professional pilot's course. An information and cost sheet listing requirements for enrollment is available.

Entrance Requirements

1. High school graduate.
2. Must be able to pass the G.E.D. test in lieu of the high school diploma.
3. Must be able to show evidence of passage of at least a second class medical certificate.
4. Individual approval, after counseling.

The Career Pilot Technology department does all the flight training on a one-to-one student-teacher ratio. This means in order for a student to complete a course on schedule, a limited enrollment is required. Before attempting to enroll, a student must contact one of the counselors for counseling. During this counseling session, the student completes an information sheet about himself and his flying experience, medical history, education, etc.

Air Technology—Regular Tuition and Fees,
Plus Fee for Flight Time—

Cessna 150	$14.00/hr., Solo; $17.00/hr., Dual
Mooney M20	$25.00/hr., Solo; $28.00/hr., Dual
Flightmatic Ground Trainer	$ 7.00/hr., Solo; $10.00/hr., Dual
Twin Engine	$75.00/hr.

AIR TECHNOLOGY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
AIR 133	3	AIR 135	3
AIR 121	2	AIR 232	3
AIR 122	2	AIR 123	2
English	3	AIR 114	1
Physical Education	1	English	3
Elective	3	Physical Education	1
Elective	3	Elective	3
	17		16

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
AIR 236	3	AIR 238	3
AIR 225	2	AIR 217	1
AIR 226	2	AIR 228	2
PSI 231	3	PSI 232	3
Elective	3	Elective	3
Elective	3	Elective	3
	16		15

Aviation Electives:
AIR 221, 237, 216, 239, 218, 219, 131, 132

ART

Suggested course of study leading to the Bachelor of Arts Degree:

FRESHMAN YEAR

1st Semester	Hours
ART 131	3
ART 133	3
ENG 131	3
Foreign Language	4
ART 138	3
Physical Education	1
PSY 111	1
	18

2nd Semester	Hours
ART 134	3
ART 132	3
ENG 132	3
Foreign Language	4
ART 139	3
Physical Education	1
	17

SOPHOMORE YEAR

1st Semester	Hours
ART 233 or 231	3
ART 235 or 238	3
English (Sophomore)	3
Foreign Language	4
PSI 231	3
Physical Education	1
	17

2nd Semester	Hours
ART 234 or 232	3
ART 236 or 238	3
English (Sophomore)	3
Foreign Language	4
PSI 232	3
Physical Education	1
	17

AUTO BODY REPAIR

The auto body repair courses require five quarters or fifteen months for completion. The courses are one quarter in length and are all offered each quarter. The instruction is individualized and students in the same shop study different topics. Each course contains 360 hours of instruction with the ratio of lecture to laboratory adjusted as needed. Each student will be required to attend classes in related mathematics, communications, and shop management (60 hours per quarter)* during his initial quarters of enrollment. The student who is capable may test out of studies in some of the related areas. The courses in auto body are:

1st Quarter

ABR 161 Basic Body Shop..... 360 clock hours

2nd Quarter

ABR 162 Minor Body Repair ..... 360 clock hours

3rd Quarter

ABR 163 Major Body Repair ..... 360 clock hours

4th Quarter

ABR 164 Automotive Body Refinishing ..... 360 clock hours

5th Quarter

ABR 165 Advanced Body Shop..... 360 clock hours

*Students in Auto Body will take Related Communications, Related Mathematics, and Small Business Management.

AUTOMOTIVE MECHANICS

The automotive mechanics courses require six quarters or eighteen months for completion. The courses are one quarter in length and are designed to be taken in any order. Each course contains 360 hours of instruction, with the ratio of lecture to laboratory adjusted as needed. Each student will be required to attend classes in related mathematics, communications, and shop management (60 hours per quarter)* during his initial quarters of enrollment. The student who is capable may test out of studies in some of the related areas. The courses in automotive mechanics are:

1st Quarter

AUM 161 Engine Maintenance and Overhaul..... 360 clock hours

2nd Quarter

AUM 162 Engine Systems
and Tune-up Practices..... 360 clock hours

3rd Quarter

AUM 163 Chassis and Suspension
and Maintenance ..... 360 clock hours

4th Quarter

AUM 164 Drum and Disc Brake Systems ..... 360 clock hours

5th Quarter

AUM 165 Electrical Systems and
Air Conditioning ..... 360 clock hours

6th Quarter

AUM 166 Power Train Maintenance and Assembly
of Standard and Automatic Transmissions ..... 360 clock hours

*Students in Auto Mechanics will take Related Communications, Related Math, Small Business Management, and Applied Drafting.

AUTOMOTIVE TECHNOLOGY APPRENTICESHIP

Admission Requirements

Applicants must meet general college entrance requirements.

Applicants must be employed by a cooperating sponsoring dealer and registered with B.A.T.

Unless employed by a cooperating dealer at the time of application, applicants must show a satisfactory level of mechanical ability as measured by the GATBY test administered by the Texas Employment Commission.

Applicants must demonstrate a reading proficiency at or above the eighth grade level, however, students below tenth grade reading level will be required to take remedial reading courses to bring reading level to that point. Tests may be administered by Texarkana Community College.

General Fees

All fees will be the same as established in the general college catalog and outlined in the regular automotive technology courses.

AUTOMOTIVE TECHNOLOGY APPRENTICESHIP

FIRST YEAR

Fall Semester

Course Listing 1st Semester	Lect.	Lab.	Sem. Hrs.
AAP 161 Engine Maintenance and Overhaul	6	0	6
AAP 131 (Internship)*	1	40	3
	7	40	9

Spring Semester

2nd Semester			
AAP 162 Engine Systems and Tune-Up Practices	6	0	6
AAP 132 (Internship)*	1	40	3
	7	40	9

Summer Semester

1st Session			
ENG 031 Basic English	3	0	3

SECOND YEAR

Fall Semester

1st Semester			
AAP 165 Electrical Systems and Air Conditioning	6	0	6
AAP 133 (Internship)*	1	40	3
	7	40	9

Spring Semester

2nd Semester			
AAP 163 Chassis and Suspension Maintenance	6	0	6
AAP 134 (Internship)*	1	40	3
	7	40	9

*Six contact hours per week will be reported for the internship work experience.

Summer Semester

1st Session	Lect.	Lab.	Sem. Hrs.
MTH 031N	3	0	3

THIRD YEAR

Fall Semester

1st Semester

AAP 164 Drum and Disc Brake Systems	6	0	6
AAP 135 (Internship)*	1	40	3
	7	40	9

Spring Semester

2nd Semester

AAP 166 Power Train Maintenance and Assembly of standard and Automatic Transmissions	6	0	6
AAP 136 (Internship)	1	40	3
	7	40	9

Summer Semesters

1st Session

MGT 238 Human Relations	3	0	3

*Six (6) contact hours per week will be reported for the internship work experience.

BUSINESS ADMINISTRATION
(Associate Degree)

FRESHMAN YEAR

1st Semester	Hours
ENG 131	3
HST 133	3
MTH 133	3
Lab Science	4
*BUA 131	3
PSY 111	1
Physical Education	1
	18

2nd Semester	Hours
ENG 132	3
HST 134	3
MTH 230	3
Lab Science	4
*DAP 130	3
Physical Education	1
	17

SOPHOMORE YEAR

1st Semester	Hours
English (Sophomore)	3
*PSI 231	3
ECO 231	3
ACC 231	3
*BUA 233	3
Physical Education	1
	16

2nd Semester	Hours
*SPE 133	3
PSI 232	3
ECO 232	3
ACC 232	3
*SOC 131 or PSY 231	3
Physical Education	1
	16

*Students are urged to follow the degree plan of the college from which they eventually plan to earn a Bachelor's Degree.

BUSINESS EDUCATION
(Associate Degree)

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
ENG 131	3	ENG 132	3
SEC 132	3	MTH 230	3
SEC 135	3	SEC 233	3
HST 133	3	Lab Science	4
PSY 111	1	HST 134	3
Physical Education	1	Physical Education	1
MTH 133	3		
	17		17

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
English (Sophomore)	3	*English (sophomore) or SPE 133	3
*PSI 231	3	PSI 232	3
ECO 231	3	ECO 232	3
ACC 231	3	ACC 232	3
Lab Science	4	BUA 233, PSY 231, SOC 131, SOC 231, GEO 131	3
Physical Education	1	Physical Education	1
	17		16

***Note:** Students are urged to follow the degree plan of the college from which they eventually plan to earn a Bachelor's Degree.

BIOLOGY

The Department of Biology offers freshman and sophomore courses required for degrees in biology, pre-medicine, pre-dentistry, pre-pharmacy, medical technology*, agriculture and related areas. Non-science majors often enroll in biology courses in order to meet a portion of their science requirements.

*After completion of two years of course work at Texarkana Community College and one year of additional training at certain four year institutions, the student may enroll in St. Michael Hospital School of Medical Technology or Wadley School of Medical Technology and complete a Medical Technologist Degree. The student should contact the local institution for further information regarding these programs.

BIOLOGY

FRESHMAN YEAR

1st Semester	Hours
BIO 141	4
CHM 141	4
MTH 131	3
HST 133	3
ENG 131	3
Physical Education	1
PSY 111	1
	19

2nd Semester	Hours
BIO 142	4
CHM 142	4
MTH 132	3
HST 134	3
ENG 132	3
Physical Education	1
	18

SOPHOMORE YEAR

1st Semester	Hours
BIO 241	4
CHM 241	4
PHY 141	4
PSI 231	3
English (Sophomore)	3
Physical Education	1
	19

2nd Semester	Hours
BIO 242	4
CHM 242	4
PHY 142	4
PSI 232	3
Elective	3
Physical Education	1
	19

CHEMISTRY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 141	4	CHM 142	4
ENG 131	3	ENG 132	3
HST 133	3	HST 134	3
*MTH 136	3	MTH 231	3
Physical Education	1	Physical Education	1
PSY 111	1	**Elective	3
**Elective	3		
	18		17

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 241	3	CHM 242	4
**English (Sophomore)	3	CHM 253	5
MTH 232	3	MTH 233	5
Physical Education	1	Physical Education	1
PHY 243	4	PHY 244	4
**Elective	3	**English (Sophomore)	3
	18		20

*A student who has poor background in algebra and trigonometry should enroll in MTH 131 and 132 prior to enrolling in MTH 136.

**Student should consult with advisor and study program from degree-granting institution.

COMMERCIAL ELECTRONICS

General Information

The changing patterns in electronics makes it necessary to amend the present electronics program at Texarkana Community College. The present curriculum stresses radio and television technical training, the new program will deal with integrated circuits and digital instruments. Classroom instruction and laboratory practices will be based on trouble-shooting transistorized equipment as it would apply to heavy industry.

It has been found that digital type of instrumentation is necessary in many of the large industries in the Texarkana Community College service area such as Nekoosa Edwards Paper Company, International Paper Company, Red River Army Depot, Cooper Tire and Rubber Company, and like industries. It is felt that this transition in the electronics offering at T.C.C. is necessary to meet the demands for technicians in these heavy industrial areas.

COMMERCIAL ELECTRONICS

FULL-TIME STUDENTS

First Year — First Semester	Sem Hrs	Lec Lab	Clock Hours
CET 161 Fundamentals of Electricity I	6	5- 4	144
PSY 111 Freshman Orientation and Adjustment	1	1- 0	16
MTH 131 College Algebra (or GRC 131)	3	3- 0	48
ENG 031 Basic English (or ENG 131)	3	3- 0	48
Mid-Management Elective*	3	3- 0	48
TOTAL	16	15- 4	304
First Year — Second Semester			
CET 131 Fundamentals of Electricity II	3	2- 2	64
CET 162 Fundamentals of Electronics I	6	5- 4	144
Elective*	3	3- 0	48
MTH 132 Plane Trigonometry (or GRC 231)	3	3- 0	48
TOTAL	15	13- 6	304
Second Year — First Semester			
CET 134 Standards of Workmanship I	3	1- 3	64
CET 163 Electronic Test Equipment I	6	3- 6	144
CET 132 Fundamentals of Electronics II	3	2- 2	64
CET 141 Basic Transistors	4	3- 2	80
TOTAL	16	9-13	352
Second Year — Second Semester			
CET 135 Soldering Electrical Connections	3	1- 2	48
CET 133 Electronic Test Equipment II	3	2- 2	64
CET 164 Trouble-Shooting Transistorized Equipment	6	3- 6	144
CET 136 Introduction to Integrated Electronics	3	3- 0	48
CET 165 Linear and Digital Integrated Circuits	6	5- 4	144
SEMESTER TOTAL	20	14-14	448
PROGRAM TOTAL	68	51-37	1408

*Approved Mid-Management Electives: MGT 237, Foremanship; MGT 238, Human Relations. Other Electives: SPE 133, Business and Professional Speech; EGR 131, Engineering Graphics; CSI 131, Digital Computer Principles; SOC 131, Principles of Sociology; MTH 133, Fundamental Concepts of Mathematics I.

COMPUTER SCIENCE

FRESHMAN YEAR

1st Semester	Hours
ENG 131	3
*MTH 131	3
*MTH 132	3
CSI 131	3
CHM 141 or BIO 141	4
HST 133 (Summer)	3
PSY 111	1
Physical Education	1
	21

2nd Semester	Hours
ENG 132	3
MTH 136	3
MTH 231	3
CSI 231	3
CHM 142 or BIO 142	4
HST 134	3
Physical Education	1
	20

SOPHOMORE YEAR

1st Semester	Hours
English (Sophomore)	3
MTH 232	3
CSI 232	3
PHY 243	4
PSI 231	3
Physical Education	1
	17

2nd Semester	Hours
English (Sophomore)	3
MTH 233	3
PHY 244	4
**Elective	4
Physical Education	1
	15

*A student should have an adequate background in mathematics including two years of high school algebra and one course in trigonometry before taking MTH 136 and MTH 231. Otherwise it is recommended the student take MTH 131 and MTH 132 prior to enrolling in MTH 136 and MTH 231.

**Foreign language preferred.

CREDIT UNION MANAGEMENT

PURPOSE

The purpose of this program is to meet the educational needs of Northeast Texas Credit Unions. This program will dovetail five basic Credit Union courses into an existing Business Education Degree, resulting in an employee with the educational background to serve in a middle level management capacity in a credit union.

This program was created with the assistance of the Texas Credit Union League, as well as managers and employees of a number of Northeast Texas credit unions.

CREDIT UNION MANAGEMENT

FRESHMAN YEAR

1st Semester	Hours
ENG 131 Composition & Rhetoric I	3
ACC 131 Elementary Accounting *or* Principles of Accounting I (231)	3
CRU 131 Principles of Credit Union Operations	3
BUA 130 Business Math	3
DAP 130 Introduction to Data Processing	3
SEC 131 Elementary Typewriting	3
	18

2nd Semester	
ENG 132 Composition & Rhetoric II	3
ACC 231 Principles of Accounting I *or* Principles of Accounting II (232)	3
CR' 132 Principles of Management and Marketing	3
BUA 131 Introduction to Business	3
DAP 134 ANS COBOL Programming	3
SEC 132 Intermediate Typewriting *or* Approved Elective	3
	18

SOPHOMORE YEAR

1st Semester

ECO 231 Principles of Economics I	3
CRU 231 Advanced Credit Analysis	3
PSI 231 State and Federal Constitutions	3
SEC 238 Business Correspondence	3
App. Elective	3
	15

2nd Semester	Hours
SPE 131 Public Speaking I or Business and Professional Speech (133)	3
CRU 232 Collection Principles and Financial Counseling	3
CRU 233 Financial Law, Rules and Regulations as applied to Credit Unions	3
App. Elective	3
App. Elective	3
	15

Approved Electives

BUA 233 Business Law I
BUA 234 Business Law II
BUA 235 Personal Finance
ECO 232 Principles of Economics II
PSY 236 Child Psychology and Development
SEC 131 Elementary Typewriting
SEC 132 Intermediate Typewriting
SEC 134 Beginners' Shorthand
SEC 135 Intermediate Shorthand
SEC 138 Office Practice
SEC 133 Office Machines

DATA PROCESSING COURSE REQUIREMENTS
ASSOCIATE DEGREE IN APPLIED SCIENCE

FRESHMAN YEAR

First Semester	Hours
DAP 130 Introduction to Data Processing	3
DAP 132 Basic Programming	3
*APPROVED ELECTIVE	3
ENG 031 Basic English	
or 131 Composition and Rhetoric I	3
MTH 133 The Fundamental Concepts of Mathematics I	3
PSY 111 Freshman Orientation	1
TOTAL	16

Second Semester	
DAP 134 ANS COBOL Programming	
or 236 FORTRAN Programming	3
DAP 231 PL/I Programming	3
ENG 131 Composition and Rhetoric I	
or 132 Composition and Rhetoric II	3
ACC 131 Elementary Accounting	
or 231 Principles of Accounting	3
*APPROVED ELECTIVE	3
TOTAL	15

SOPHOMORE YEAR

Third Semester

DAP 233 Assembler Language Programming	3
DAP 234 RPG II Programming	3
DAP 235 Advanced Automated Accounting System	3
*APPROVED ELECTIVE	3
**APPROVED ADVANCED DAP ELECTIVE	3
TOTAL	15

Fourth Semester

DAP 246 Computer Operations	4
DAP 232 Internship	3
PSI 231 State and Federal Constitutions	3
ENG 237 Selected Studies in Literature	3
*APPROVED ELECTIVE	3
TOTAL	16

*APPROVED ELECTIVE—Any course in CSI, ACC, MTH, DAP, PHY
**APPROVED ADVANCED DAP ELECTIVE—DAP 230, DAP 236

DATA PROCESSING

KEYPUNCH OPERATOR
(A one-semester certificate program)

Course Name and Number	
DAP 130 Introduction to Data Processing	3
DAP 131 Key Punch Operation	3
BUA 130 Business Mathematics	3
ACC 131 Elementary Accounting	3
BUA 131 Introduction to Business	3
TOTAL	15

COMPUTER OPERATOR/PROGRAMMER
(A one-year certificate program)

First Semester

DAP 130 Introduction to Data Processing	3
DAP 134 ANS COBOL Programming	3
DAP 132 BASIC Programming Language or 236 FORTRAN Programming Language	3
DAP 231 PL/I Programming	3
ACC 131 Elementary counting	3
MTH 133 The Fundamental Concepts of Mathematics I	3
TOTAL	18

Second Semester

DAP 233 Assembler Language Programming	3
DAP 246 Computer Operations	3
DAP 234 RPG II Programming	3
DAP 235 Advanced Automated Accounting System	3
DAP 230 Advanced ANS COBOL Programming	3
DAP 232 Internship in Data Processing	3
TOTAL	18

DENTISTRY
(See Pre-Dentistry)

DRAFTING TECHNOLOGY

FRESHMAN YEAR

1st Semester	Hour –	2nd Semester	Hours
ENG 131	3	ENG 132	3
MTH 131	3	MTH 132	3
EGR 111	1	EGR 112	1
EGR 131	3	EGR 132	3
EGR 133	3	EGR 134 or 135	3
HST 133	3	HST 134	3
Physical Education	1	Physical Education	1
PSY 111	1		
	18		17

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
EGR 135 or 134	3	CSI 231	3
EGR 137	3	EGR 136	4
PHY 141	4	PHY 142	4
PSI 231	3	PSI 232	3
SPE 131	3	English (sophomore)	3
Physical Education	1	Physical Education	1
	17		17

DRAMA

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
English 131	3	English 132	3
History 131 or 133	3	History 132 or 134	3
Drama 111	1	Drama 112	1
Drama 131	3	Drama 132	3
Drama 134	3	Music 1116	1
Music 1115	1	Foreign Language or Science	4
Psychology 111	1		
	15		15

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
English (sophomore)	3	English (sophomore)	3
Political Science 231	3	Political Science	3
Drama 113	1	Drama 114	1
Drama 135	3	Drama 136	3
Music 2115	1	Music 2116	1
Foreign Language or Science	4	Speech	3
		Physical Education	1
	15		15

ELEMENTARY EDUCATION

Students majoring in Elementary Education should consult a catalogue from the school to which they plan to transfer.

FRESHMAN YEAR

1st Semester	Hours
ENG 131	3
SOC 131	3
Science	4
MUS 137	3
MTH 135	3
Physical Education	1
PSY 111	1
	18

2nd Semester	Hours
ENG 132	3
PSY 231	3
Science	4
MUS 138	3
MTH 137	3
Physical Education	1
	17

SOPHOMORE YEAR

1st Semester	Hours
English (sophomore)	3
HST 133	3
PSI 231	3
ART 135	3
GYP 131	3
Physical Education	1
Elective	3
	19

2nd Semester	Hours
English (sophomore)	3
HST 134	3
PSI 232	3
ART 136	3
Physical Education	1
Elective	6
	19

SECONDARY EDUCATION

Students are urged to follow the degree plan of the college from which they eventually plan to earn a Bachelor's Degree.

FRESHMAN YEAR

1st Semester	Hours
ENG 131	3
HST 133	3
Physical Education	1
PSY 111	1
Science	4
Approved Electives	6
	18

2nd Semester	Hours
ENG 132	3
HST 134	3
Physical Education	1
Science	4
Approved Electives	6
	17

SOPHOMORE YEAR

1st Semester	Hours
English (sophomore)	3
PSI 231	3
Physical Education	1
PSY 232 or SOC 131	3
Foreign Language or Mathematics	3
Approved Electives	3
	16

2nd Semester	Hours
English (sophomore)	3
PSI 232	3
Physical Education	1
Foreign Language or Mathematics	3
Approved Electives	6
	16

APPROVED ELECTIVES

PSY 231 and 232
SOC 131, 231, and 232
GPY 131 and 132
HST 131, 132, 233, 234, 231
ANT 131

EMERGENCY MEDICAL TECHNICIAN PROGRAM

The EMT programs at Texarkana Community College include curricula that meets State Department of Health standards for technicians in emergency medical areas.

The EMT-Basic Program consists of two courses. A combination of class lectures, on-the-job training, skills training, and clinical training incorporates theoretical and practical application of emergency medical care. Reliance is placed heavily on demonstration and practice as a teaching method.

The EMT-Advanced (Paramedics) is open only to individuals who have completed the EMT-Basic. It consists of three additional courses, or an additional 15 semester hours.

BASIC PROGRAM

Course No.	Sem. Hours
EMT 141	4
EMT 142	4

Upon the completion of this curriculum the student is eligible to take the state examination for certification as a registered Emergency Technician by the Texas State Department of Health.

ADVANCED PROGRAM

Course No.	Sem. Hours
EMT 161	6
EMT 162	6
EMT 133	3
EMT 241	4

Upon completion of this curriculum, the student is eligible to take the state examination for certification as a registered Advanced Emergency Medical Technician by the Texas State Department of Health.

ADMISSION REQUIREMENTS

General qualificaitons of the student will be those required for entrance to the college. Admission to EMT-Advanced Program depends on completion of the EMT-Basic Program. Completion of EMT-Basic Program does not insure admission of the Advanced Program.

ENGINEERING

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 141	4	EGR 112	1
EGR 111	1	EGR 132	3
EGR 131	3	MTH 232	3
*MTH 136	3	ENG 132	3
*MTH 231	3	Physical Education	1
ENG 131	3	PHY 243	4
Physical Education	1	CHM 142	4
PSY 111	1		
	19		19

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
CSI 231	3	PSI 231	3
EGR 231	3	EGR 232	3
PHY 244	4	PHY 245	4
English (sophomore)	3	MTH 233	3
HST 133	3	HST 134	3
Physical Education	1	Physical Education	1
	17		17

*A student should have an adequate background in mathematics including two years of high school algebra and one course in trigonometry before taking MTH 136 and MTH 231. Otherwise it is recommended the student take MTH 131 and MTH 132 prior to enrolling in MTH 136 and MTH 231.

ENGINEERING TECHNOLOGY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
EGR 111	1	EGR 112	1
CHM 141	4	CHM 142	4
EGR 131	3	EGR 132	3
MTH 131	3	MTH 136	3
MTH 132	3	CSI 231	3
PSY 111	1	Physical Education	1
Physical Education	1		
	16		15

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
SPE 131	3	ECO 231	3
MTH 231	3	HST 134	3
PHY 243	4	MTH 232	3
HST 133	3	PHY 244	4
EGR 135	3	PSI 231	3
Physical Education	1	Physical Education	1
	17		17

FARM AND RANCH MANAGEMENT

The curriculum in Farm and Ranch Management is designed for those students who wish to terminate their formal college training after two years of study and obtain employment in agricultural business management positions. While the program is designed to provide extensive training in farm and ranch management operation, the course work is sufficiently broad to enable the graduate to function effectively in other agricultural business positions.

The Associate in Applied Science in Farm and Ranch Management degree is awarded the students who successfully complete the prescribed curriculum.

FARM AND RANCH MANAGEMENT

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
AGR 131	3	AGR 143	4
AGR 141	4	FRM 132	3
ENG 131	3	FRM 142	4
FRM 131	3	FRM 143	4
BUA 130	3	FRM 144	4
PSY 111	1		
	17		19

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
FRM 236	3	FRM 233	3
FRM 242	4	FRM 241	4
FRM 243	4	FRM 245	4
FRM 247	3	*Approved Electives	6-8
*Approved Electives	3-4		
	17-18		17-19

APPROVED ELECTIVES

FRM 231	FRM 235	FRM 246
FRM 232	FRM 244	FRM 249

ANY AGRICULTURE COURSE

FIRE PROTECTION TECHNOLOGY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
ENG 031 or 131	3	FPT 133	3
FPT 131	3	FPT 135	3
FPT 132	3	FPT 136	3
FPT 124	3	FPT 239	3
SPE 131	3	Free Elective	3
PSY 111	1		—
	—		15
	16		

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 141	4	CHM 142	4
FPT 231	3	FPT 232	3
FPT 233	3	FPT 234	3
FPT 235	3	FPT 246	4
PSI 231	3	Free Elective	3
Approved Elective	3	Approved Elective	3
	—		—
	19		20

APPROVED ELECTIVES

FPT 139
MED 141
MED 142
FPT 237
FPT 236

FORESTRY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
AGR 131	3	CHM 142	4
BIO 143	4	ENG 132	3
CHM 141	4	HST 133	3
ENG 131	3	MTH 132	3
MTH 131	3	Physical Education	1
Physical Education	1	BIO 144	3
PSY 110	1		
	19		17

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
BIO 244	4	BIO 243	4
GEO 141	4	AGR 241	4
PSI 231	3	SPE 131 or 133	3
MTH 136 or CSI 231	3	PSI 232	3
Physical Education	1	Physical Education	1
PHY 141	4	PHY 142	4
	19		19

HEAVY EQUIPMENT MECHANICS
(Clock Hour Program)

The instructional program in Heavy Equipment Mechanics provides broad, intensive training in all aspects of heavy equipment mechanics. This includes design, assembly and repair of internal combustion engines (gas and diesel), power applications, fuel, hydraulic, and electrical systems. Additional training is provided in welding and blue print reading as well as supportive courses in communications, mathematics, and management.

Students who successfully complete the prescribed curriculum are awarded the Associate in Applied Science degree in Heavy Equipment Mechanics.

1st quarter

HEM 161 Internal Combustion Engine I..... 360 clock hours

2nd Quarter

HEM 162 Internal Combustion Engine II..... 360 clock hours

3rd Quarter

HEM 163 Power Applications..... 360 clock hours

4th Quarter

HEM 164 Industrial Co-op Training I..... 360 clock hours

5th Quarter

HEM 165 Industrial Co-op Training II ..... 360 clock hours

6th Quarter

HEM 166 Industrial Co-op Training III ..... 360 clock hours

*Students in Heavy Equipment Mechanics will take applied drafting, related communications, related math, and small business management.

HEAVY EQUIPMENT MECHANICS
(Semester Hour Program)

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
HEM 161	6	HEM 162	6
HEM 141	4	HEM 142	4
HEM 131	3	HEM 132	3
*Communications Elective	3	**Math Elective	3
	16		16

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
HEM 163	6	HEM 164	6
HEM 133	3	HEM 165	6
HEM 143	4	***Suggested Elective	3
MGT 237	3		15
	16		

*Approved communications electives:
ENG 031, ENG 131, GRC Related Communications 132
**Approved math electives:
MTH 130, MTH 131, MTH 132, GRC Related Math 131
***Suggested electives:
BUA 131, SPE 133, EGR 131, DAP 130, SOC 131

INDUSTRIAL ELECTRICITY

The Industrial Electricity course requires five quarters or fifteen months for completion. The courses are one quarter in length and are all offered each quarter. The instruction is individualized and students in the same shop study different topics. Each course contains 360 hours of instruction with the ratio of lecture to laboratory adjusted as needed. Each student will be required to attend classes in related mathematics, communications, and shop management (60 hours per quarter)* during his initial quarters of enrollment. The student who is capable may test out of studies in some of the related areas. The courses in Industrial Electricity are:

1st Quarter

IEL 161 Introduction to Electronic Theory..... 360 clock hours

2nd Quarter

IEL 162 Basic Wiring and Code Requirements..... 360 clock hours

3rd Quarter

IEL 163 A.C. and D.C. Motors and Theory ..... 360 clock hours

4th Quarter

IEL 164 Control Relays and Electro-Hydraulic Controls..... 360 clock hours

5th Quarter

IEL 165 Practical Application of Wiring..... 360 clock hours

*Students in Industrial Electricity will take related communications, math, and small business management.

INDUSTRIAL MANAGEMENT
(Associate Degree in Applied Science)

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
MGT 141	4	MGT 142	4
MGT 131	3	MGT 132	3
ENG 131	3	ENG 132	3
BUA 130	3	ACC 131 or 231	3
ECO 131 or 231	3	PSY 233 or 231	3
PSY 111	1	*Physical Education	1
*Physical Education	1		—
	—		17
	18		

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
MGT 241	4	MGT 242	4
MGT 231	3	MGT 232	3
MGT 238	3	MGT 237	3
MGT 239	3	MGT 235	3
Free Elective	3	Free Elective	3
	—		—
	16		16

*Can be taken any semester.

LAW
(See Pre-Law)

LAW ENFORCEMENT TECHNOLOGY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
HST 133	3	HST 134	3
ENG 131	3	ENG 132	3
LEA 131	3	LEA 133	3
LEA 132	3	LEA 134	3
Language Elective	4	Science or Foreign Language Elective	4
PSY 111	1		
	17		16

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
PSI 231	3	PSI 232	3
ENG Literature Elective	3	LEA 234	3
LEA 232	3	LEA 235	3
LEA 241	4	Approved Elective	3
Approved Elective	3	Humanities Elective	3
Approved Elective	3		
	19		15
		Total	67

MATHEMATICS
(Suggested Courses of Study for a Bachelor's Degree)

FRESHMAN YEAR

1st Semester	Hours
*MTH 136	3
*MTH 231	3
ENG 131	3
HST 133	3
CHM 141 or Foreign Language or Elective	4
PSY 111	1
Physical Education	1
	18

2nd Semester	Hours
MTH 232	3
ENG 132	3
HST 134	3
CHM 142 or Foreign Language or Elective	4
Physical Education	1
	14

SOPHOMORE YEAR

1st Semester	Hours
MTH 234	3
English (Sophomore)	3
CSI 231	3
PHY 243	4
PSI 231 or Foreign Language or Elective	3
Physical Education	1
	17

2nd Semester	Hours
MTH 233	3
English (Sophomore)	3
CSI 232	3
PHY 244	4
PSI 232 or Foreign Language or Elective	3
Physical Education	1
	17

*A student should have an adequate background in mathematics including two years of high school algebra and one course in trigonometry before taking MTH 136 and MTH 231. Otherwise it is recommended the student take MTH 131 and MTH 132 prior to enrolling in MTH 136 and MTH 231.

MEDICAL
(See Pre-Medical)

MEDICAL TECHNOLOGY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 141	4	CHM 142	4
BIO 145	4	BIO 146	4
MTH 131	3	MTH 132	3
HST 133	3	ENG 132	3
Physical Education	1	BIO 144	4
ENG 131	3	Physical Education	1
PSY 111	1		—
	—		19
	19		

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 253	5	PSI 231	3
CHM 241	4	CHM 242	4
PHY 141	4	PHY 142	4
English (sophomore)	3	English (sophomore)	3
HST 134	3	BIO 242	4
	—		—
	19		18

MID-MANAGEMENT
(Associate Degree in Applied Science)

FRESHMAN YEAR

1st Semester	Hours
MGT 141	4
MGT 131	3
MGT 133	3
ENG 131	3
BUA 130	3
PSY 111	1
*Physical Education	1
	18

2nd Semester	Hours
MGT 142	4
MGT 132	3
ACC 131 or 231	3
ENG 132	3
PSY 233 or 231	3
*Physical Education	1
	17

SOPHOMORE YEAR

1st Semester	Hours
MGT 241	4
MGT 231	3
MGT 238	3
ECO 131 or 231	3
Free Elective	3
	16

2nd Semester	Hours
MGT 242	4
MGT 232	3
MGT 235	3
MGT 237	3
Free Elective	3
	16

*Can be taken any semester.

MUSIC

General Information

The Texarkana College Department of Music offers the first two years of a curriculum leading toward a Bachelor of Music Education degree, and a Bachelor of Arts with a major in music.

Courses taught are those required for the first two years of a senior college, and if successfully completed, will offer no difficulty to the student in transferring to a senior college.

Since the study of music in the first two years is largely the accumulation of fundamental music skills, a suggested course of study is offered which will encourage the development of these skills. Taking these courses out of order or postponing courses until the junior or senior year may seriously jeopardize the student's degree or even prolong the term of study.

During the first semester of enrollment in the Department of Music each student is assigned an advisor who will counsel him during his first two years of study. This will normally be the faculty member who teaches the student's major applied instrument. This will assure an adherence to the prescribed curriculum and avoid confusion in planning the course of study.

Each student planning to earn a music degree will choose voice or an instrument which he will study each semester during the two years. Those who wish to have this instrument as their major and who qualify will register for the two hour course of instruction.

Private instruction in Voice, Piano, Organ, Synthesizer, Band and Orchestral Instruments is offered each semester for students majoring or minoring in Applied Music. Those students majoring in piano or organ are required to take Class Piano 115, 116, 215, 216. All music majors not using piano as applied music concentration are required to take the piano courses for non-majors. **IN ADDITION, ALL MUSIC MAJORS AND MINORS MUST PARTICIPATE IN A MAJOR ENSEMBLE EACH SEMESTER THAT THEY ARE ENROLLED IN THE MUSIC DEPARTMENT.**

Music as a Minor

Students who elect music as a minor may complete their minimum two years requirements by selecting courses in music theory, music literature, music education, and applied music. If students plan to minor in music they should contact one of the music faculty members to outline their course of study to include the necessary music courses.

Examinations in Music

Students who are found to be deficient in the study of music theory are required to enroll in Music 041 prior to beginning the normal sequence of theory courses. Music theory placement tests are given at the beginning of each semester to determine the student's abilities to pursue the normal theory sequence. The time and dates of this test are listed in the college calendar.

Financial Aid in Music

Financial aid is offered each year in band, choir, piano, organ, and instrumental music to students with both outstanding talent and financial need. Further information may be secured from the Chairman of the Music Department.

Music Course Numbering System

The first digit represents the level of the course: 1 for freshman level and 2 for sophomore level; the second digit represents semester hour value of the course; and the third digit differentiates courses within the department; and the fourth digit represents the semester of study.

APPLIED MUSIC

Course Numbering System for Applied Music

The four number system for applied music includes a key for each digit of the course number. First number indicates level, or year, for which the course is intended; the second number the hours of credit; the third, the field (see key below); and the fourth, the semester of study, as 1, 2, 3, 4.

Applied Music course MUS 2234 would be interpreted, thereafter as (1) a sophomore course, (2) giving two hours of credit, (3) in wind instruments, (4) and the student is in his fourth semester of study.

KEY—The third number of the course number will be one of the following, and will indicate:

1. Piano
2. Voice
3. Wind Instruments
4. Strings
5. Organ
6. Choir
7. Percussion
8. Vocal Ensemble
9. Band
10. Stage Band

All Applied Music students must sign up for one hour per week of lab, studio or concert recitals.

MUSIC EDUCATION

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
MUS 131	3	MUS 132	3
MUS 111	1	MUS 112	1
MUS 115	1	MUS 116	1
MUS 233	3	MUS 234	3
Applied Major	2	Applied Major	2
Applied Minor	1	Applied Minor	1
Ensemble	1	Ensemble	1
ENG 131	3	ENG 132	3
Physical Education	1	Physical Education	1
MUS 113 or 213	1	MUS 114 or 214	1
PSY 111	1	*MUS 119	1
	18		18

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
MUS 231	3	MUS 232	3
MUS 211	1	MUS 212	1
MUS 215	1	MUS 216	1
Applied Major	2	Applied Major	2
Applied Minor	1	Applied Minor	1
Ensemble	1	Ensemble	1
English (sophomore)	3	English (sophomore)	3
HST 133	3	HST 134	3
MUS 113 or 213	1	MUS 114 or 214	1
Physical Education	1	Physical Education	1
	17		17

*Required of Voice Majors only.

NURSING

Information For All Health Occupations Students

1. Student loans are available. For more information, contact the Dean of Students, TCC.

2. Students are responsible for their own transportation between college and the hospital or other health agencies, including field trips.

3. For educational reasons, the full-time student should not be employed for more than 24 hours per week (equivalent to three days, eight-hour shifts). Failure to meet class requirements, protracted fatigue, and sleepiness can lead to omissions in learning and errors in performance in giving care. Such circumstances may lead to being dropped from the program. Additionally, class hours, requirements and learning needs have priority over work hours and the student is expected to arrange work hours in accord with same. Students employed are not permitted to wear the school uniform or any identification implying the TCC student role. Performance for pay is the legal responsibility of the employing agency.

4. A student who withdraws from the program, for whatever reason, will be required to fulfill all admission requirements before request to reenter will be considered. (VN and EMT students must re-enter within 12 months and ADN students within 3 years to retain credit for major courses)

5. A student who fails a course in the major or who withdraws while failing will be permitted one other opportunity to enroll. This student will be counseled and recommendations, such as evaluating grade point average, retesting reading skills, etc., will be made. Upon completion of these recommendations, the student must then reapply for admission into the program. Re-enrollment in a class will be dependent on space available.

6. Students who have exited a program before completion and are interested in returning are expected to seek employment in a health agency during the interim to retain their skills.

7. Periodically, it may be necessary to enroll in late afternoon/early evening classes. Additionally, to meet learning needs, students may be required to attend lab at hours different from those scheduled.

8. Students are expected to arrange time to study in the autotutorial lab (ATL) located in the nursing building. The amount of study time, whether at home or on campus, will depend upon personal needs of the student.

9. Absence from lab. is not permitted because of the concern that absence from labs reduces learning opportunities to be safe in actual patient care. For *unsubstantiated absenteeism,* the student may be asked to withdraw from the program. For emergency situations in which the absenteeism is *substantiated* and limited, the student may be permitted to continue in the program, but all absences must be made up at the end of the course. The term having ended, the student may be assessed a make-up fee.

10. All students, except EMT-Basic, must carry liability insurance.

11. No one will be admitted without a physical examination within six months prior to acceptance. Forms are available in the Nursing Department.

12. Students must follow the degree plan as printed in this section unless granted permission to deviate by the division chairman.

13. Transfer students will be admitted into either nursing program only after granting permission to obtain information from the previous school of nursing. A recommendation indicative of good standing from the previous school of nursing will be required.

14. Any student enrolled at TCC in either the Vocational Nursing, Associate Degree Nursing, or Emergency Medical Services programs, will be asked to withdraw from the major when their academic, clinical, or personal performance is determined to be inconsistent with professional responsibility and accountability. In rare instance, patient welfare and safety may be best served by counseling a student out of the program. As a professional program, it is the responsibility of the faculty to take this action when indicated.

    Examples:
    a. Habitual Lying.
    b. Persistent judgmental errors in performance of care.
    c. Medical/emotional problems requiring heavy tranquilization.
    d. Continuing behaviors which disrupt teaching with detrimental effect upon other students and agency personnel.
    e. Use of patient's medication for self or others.
    f. Illegally gaining and distributing drugs.
    g. Abusive use of hallucinogenic drugs or alcohol before or during class or clinical learning activities.
    h. Willful neglect in care of patients.
    i. Willful deceit in care of patients.
    j. Failure to fulfill attendance requirements as established by the Vocational State Board and college faculty.
    k. Failure to respect policies of health agencies used for clinical learning.
    l. Illegal attainment of patient possessions or patient care items.

15. Former nursing students planning to re-enter nursing programs may be permitted audit privileges on an individual basis, with permission of the division chairman—lectures only, no lab.

16. Pregnant students may enroll in or choose to continue in the program but must assume the risk that due to absenteeism they may not be able to finish the course the semester in which the child is born. Continual written permission from the medical doctor is required. The college is not responsible for illness, injuries, or infectious contacts.

17. Students who return to didactic and/or clinical classes after delivery, surgery, infections, or major illness must bring a release slip from a medical doctor approving functioning in the student nurse role. The college is not responsible for exacerbation of illness, injuries, or infectious contact.

18. Only LVN's, Medics, former nursing students or persons from other schools of nursing may challenge nursing courses. Applicants must have had clinical experience in the course challenged. Individual decision will be made dependent upon previous success. Plans must be made with the department of nursing no later than one full semester before anticipated enrollment. Exams must be scheduled and are subject to change.

19. The grading Scale used for all Health Occupations Students is as follows:

    92-100 = A
    83-91 = B
    74-82 = C
    65-73 = D

20. Notification to all enrolled students and persons who have completed the application process will constitute means to effectuate policy changes.

21. For counseling and research purposes, all students are expected to take NLN Exams periodically. The results enable the faculty and student to assess individual strengths and weaknesses. Fee for the examination service must be paid by the student.

ASSOCIATE DEGREE NURSING

The Philosophy and Objectives of the William Buchanan Department of Associate Degree Nursing

The faculty believes that associate degree nursing education should be an integral part of a community college. We therefore accept the democratic philosophy and objectives of Texarkana Community College as it fulfills its mission to meet the diverse educational needs of the community.

We believe that man is a holistic being, a viable composite of many parts. In effect, he is a unique and complex being with varying biological, psychological, and sociological needs and methods of communication. His potential is infinite — being expanded by interaction of his genetic and environmental characteristics.

The faculty believes that man continually strives to realize his potential for optimum health by continuous adaptive interaction with internal and external forces. Any disturbance in that interaction leads to disequilibrium of his bio - psycho sociological systems and a loss of health. Man responds to disequilibrium with varying abilities, with successful adaptation resulting in a return to optimum health, and inability to adapt resulting in loss of function or death.

The faculty believes that optimum health is the right of every individual throughout his life, and that health services should be available to him through the cooperative efforts of a wide range of professions and disciplines. Individuals have inherent dignity and the right to actively participate in making decisions which affect their state of health, and this must be respected.

Nursing works collaboratively with other health disciplines for humane, individualistic care, whatever the state of health. The faculty has adopted the International Council of Nurses' (ICN) working definition of nursing.

> "Nursing is primarily assisting individuals (sick or well) with those activities contributing to health, or its recovery (or to a peaceful death) that they perform unaided when they have the necessary strength, will, or knowledge; nursing also helps individuals carry out prescribed therapy and to be independent of assistance as soon as possible."[1]

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[1] *International Council of Nurses, Basic Principles of Nursing* 1969, quoted in Virginia Henderson, *Principles and Practice of Nursing,* (New York: MacMillan Publishing Co., Inc., 1978, p. 141.)

In effect, the faculty believes that the nurse is a facilitator of optimum health. The knowledge base and practice of nursing as a profession is directed toward health care monitoring (primary care), common health care problems of an acute or chronic nature (secondary care), and more complex, uncommon health care problems (tertiary care). The knowledge base and practice of the associate degree nurse uses the nursing process toward facilitating health for individuals with common health care problems. This level of practice requires competency with the knowledge base and with technical skills, and requires the capability for self evaluation and the evaluation of the performance of others. Upon graduation, he/she is prepared for employment, under supervision, in beginning staff nurse positions, as a facilitator of optimum health.

Learning is an increase in meaning and understanding as they relate to experiences. This is demonstrated by a change in behavior. Learning is additive, progressing from simple to complex. One must have knowledge of facts preceding the development of new concepts. Learning is enhanced by a multisensory approach.

Texarkana Community College provides an educational program in associate degree nursing primarily for adult learners of the area who come with employment and family responsibilities. The faculty believes that each individual learns in different ways and comes into the learning situation in differing stages of development, with life experiences and personal characteristics which can be used to facilitate his learning. Therefore, as learning is individualistic, students should have opportunity to be active participants in the learning process and the evaluation process. Ultimately, each student has the responsibility for his/her own learning, and for fulfillment of his/her potential. The faculty has the responsibility to direct curricular planning, implementation, and evaluation of the teaching/learning process; and the responsibility to create the learning environment so that each student has opportunity for fulfillment in the learning of nursing. The environment for learning should be one of an open, accepting nature, where the learner has freedom to question and explore. Learning experiences are designed so that the student is exposed to concepts that encourage participation in society. Further, the faculty has the responsibility to direct the learner toward discovery of means by which personal and professional growth can be continued. The faculty has responsibility to provide the student with standards by teaching nursing as it should be; to facilitate problem-solving skills regarding nursing as it is; and to facilitate examination of the scope and direction of the nursing profession. Throughout the learning process, the faculty will encourage the development of a nursing conscience, based upon moral, ethical and legal standards.

Program Objectives

It is the goal of Texarkana Community College to produce a graduate prepared to meet nursing needs primarily of individuals with common health care problems of an acute or chronic nature, (secondary care).

The associate degree nurse is a product of a terminal nursing program. Upon graduation, he/she is prepared for employment in beginning staff nurse positions, as a facilitator of optimum health for persons with common health care problems.

The following program objectives are the outcomes which have shaped this curriculum, the means of implementation, and the criteria against measurement of its success. The graduate of the Associate Degree Nursing Program will be able to apply these competencies* at a beginning staff level to persons who are ill or in parturition. The graduate is able to:

1. Utilize opportunities for personal and professional growth.
2. Utilize the nursing process to provide individualized nursing care through assessment, planning, implementation, and evaluation.
3. Communicate aspects of the nursing process to appropriate health team members.
4. Create and maintain effective interpersonal relationships.
5. Perform technical nursing skills with knowledge of scientific principles to meet the needs of the individual, family, and community.
6. Function as a facilitator of optimum health at the secondary level.
7. Ascribe responsibilities in the technical aspects of care for self and other nursing personnel commensurate with technical preparation and demonstrated abilities.
8. Utilize directions from and assist members of the health team.
9. Assist a person in seeking those community resources that can contribute to his well-being.
10. Choose to practice with a nursing conscience by applying ethical and legal principles in compliance with current standards of nursing practice.
11. Participate with the health team in the exploration of ideas for change.
12. Recognize the importance of and participate in professional organizations.
13. Demonstrate ability to assume responsibility as a community member representing health care.
14. Display an attitude of respect toward each individual within the health care setting.

15. Respect an individual's right to participate in decisions affecting his health by facilitation of patient/significant other participation in the nursing care process.
16. Maintain a safe environment.

*Competent is defined as the ability to do; proficient as the ability to do well; and mastery as the ability to do brilliantly at every occasion.

The William Buchanan Department of Nursing was established in 1959 to prepare students to become practitioners in the field of nursing. It was the first two-year associate degree program for nursing in Texas.

The associate degree program in nursing (ADN) provides a general education together with nursing education on a college level. Students receive classroom instruction and coordinated clinical experience in the nursing care of patients at local hospitals and community agencies, under supervision and guidance of the college faculty.

Upon completion of the two-year course, the student receives the Associate Degree in Applied Science in Nursing from Texarkana Community College, and is eligible to write the examination in Texas to become a registered nurse. After registration in Texas, endorsement may be secured in other states. The associate degree nursing program is accredited by the Board of Nurse Examiners for the State of Texas, as well as the National League for Nursing.

Admission Requirements

Applicants for the ADN program follow the college admission procedure. Admission will be considered on an individual basis.

Applicant must arrange an interview with the college Counseling service immediately after the application is sent. Please obtain the physical examination form from the Nursing Department and return it to the Nursing Department by March 15.

CLOSING DATE: Applicants will be considered for the Fall nursing courses based on the **date the application is received with nursing given as the major and/or date transcript is received.**

OTHER INFORMATION

1. Any or all of the general education courses listed in the curriculum may be taken prior to admission to the nursing program. Transfer courses comparable to those offered by TCC are accepted; however, previous science courses may require individual evaluation. Credit for those sciences will not be granted for courses taken over five years ago unless the applicant has been using the content, i.e., teaching sciences.
2. Students admitted into the nursing program are considered full time nursing students and will enroll in the concomitant courses or should have completed them.
3. Students must achieve at least a grade of C in all nursing and natural science courses. A 2.0 cumulative grade point average must be maintained. If not maintained, the student cannot advance further in nursing courses until the GPA is attained by success in non-nursing courses.
4. For guidance regarding licensure after graduation, it will be necessary to know if a student has even been convicted of a crime other than minor traffic violations.
5. Students enrolled in Nursing 182 may be required to go to a remote facility for the psychiatric nursing lab experience. When the college vehicle is assigned for use, students are assessed a $50 travel fee.
6. Expenses other than tuition and fees include:

Uniforms and Cap	$70.00
Accessories	40.00
Nursing Club	11.00/year
Liability Insurance	8.50/year
Books	200.00
NLN Exams	9.00

(All costs are approximate)

Requirements for Graduation

The student must make a satisfactory grade (C or above) in each of the nursing and biological science courses and accumulate a 2.0 GPA to fulfill requirements for graduation.

SUGGESTED DEGREE PLAN
NURSING — ASSOCIATE DEGREE

Degree Requirements: a minimum of 74 semester hours of credit with a 2.0 GPA. In addition a grade of "C" or above is required in science and nursing courses.

FRESHMAN YEAR

Summer Sessions (two terms)

Course	
CHM 143* ** or	
SCI 141* **	
NUR 110	
NUR 111	
ENG 131	
Total Hours	9

First Fall Semester

Course	
NUR 181	
BIO 145* **	
PSY 231*	
Total Hours	15

First Spring Semester

Course	
NUR 182	
BIO 146* **	
PSY 235*	
Total Hours	15

SOPHOMORE YEAR

Summer Session

Course	
NUR 163	
Total Hours	6

Fall Semester

Course	
NUR 264 or 286	
BIO 242* **	
SOC 131	
ENG 132	
Total Hours	16/18

Spring Semester

Course	
NUR 215	
NUR 217	
NUR 286 or	
NUR 264	
PSI 231	
Total Hours	11/13

*Co-requisite to nursing courses taught this term, or may be taken in advance of nursing taught this term.

* **Credit will not be granted for courses taken over five years ago.

VOCATIONAL NURSING PROGRAM

In cooperation with the Texas State Board of Education, the State Board of Vocational Nurse Examiners, and affiliated hospitals, Texarkana Community College offers a prescribed course in vocational nursing. The program was established in 1956.

Graduates are eligible to apply to take the examination for state licensure, and upon passing the examination, are authorized to practice as licensed vocational nurses.

The graduate of the vocational nursing program functions entirely in the dependent role. Under the supervision of qualified persons, this graduate is able to apply such competencies within this framework and is further able to:

1. give direct patient care with skill and safety.
2. practice within the legal concepts of the community.
3. effectively observe and record pertinent nursing observations.
4. display effective nursing attitudes and interpersonal relationships.
5. realize the importance of continuing education according to ability and aptitude.

ADMISSION REQUIREMENTS

1. Successful completion of the pre-entrance aptitude test. Applicants must arrange by contacting the Counseling Department, Student Center Building Texarkana Community College. Come by, call 838-4541 ext. 249, or write.
2. Completion of the application papers and physical examination form. Applicant obtains these from the Nursing Department or Admissions Office, Texarkana Community College. All papers are to be returned at the same time to the Admissions Office.
3. A high school transcript or your scores on the General Education Development Test (G.E.D.). College transcripts are acceptable.
4. A personal interview with a member of the nursing faculty or counselors. For an appointment, please call 838-4541 ext. 249, or write Texarkana Community College, Counseling Center.

Other Information

1. Two classes are admitted each year, usually near August 30 and January 1. **PLEASE APPLY NO LATER THAN 30 DAYS BEFORE THESE DATES.**
2. The college absenteeism policy is based on 88% attendance. For the vocational nursing student the faculty will compute for each course, the expected attendance for formal class periods. Because of concern that ab-

sence from the clinical area reduces learning opportunities to be safe in patient care, **no clinical absences** are permitted. In case of **substantiated** hardship, the student may miss up to 10 clinical days during the twelve months training and each day must be made up at the end of the 12 months. Violation of either the 88% attendance to formal classes and/or 10 clinical days can result in dismissal.

3. Students must achieve at least a grade of "C" (74) in each course. Those failing to meet the grade requirement cannot **continue** in the program.

VOCATIONAL NURSING

Spring Semester	**Lecture**	**Lab**
NUV 131	18	0
NUV 132	10	0
NUV 133	186	0
NUV 134	50	0
NUV 135	26	0
NUV 136	40	0
NUV 137	0	209
	330	209
Intra-Term Session		
NUV 130.1L	0	75
Summer Term (two)		
NUV 231	88	0
NUV 231.1L	0	399
	88	399
Intra-Term Session		
NUV 130.2L	0	41
Fall Semester		
NUV 232	36	0
NUV 232.1L	0	509
NUV 233	10	0
NUV 234	20	0
NUV 235	80	0
	146	509
Intra-Term Session		
NUV 130.3L	0	41

OFFICE OCCUPATIONS

FIRST QUARTER		CLOCK HOURS
OFO 131	Elementary Typewriting	66
OFO 133	Beginners' Shorthand	66
OFO 135	Bookkeeping I	60
OFO 138	Office Machines	48
GRC 131	Related Math	60
GRC 132	Related Communications	60
		360

SECOND QUARTER		
OFO 132	Intermediate Typewriting	66
OFO 134	Intermediate Shorthand	66
OFO 136	Bookkeeping II	60
OOF 137	Office Practice I	48
OFO 139	Graphic Arts I	60
GRC 232	Related Communications	60
		360

THIRD QUARTER		
OFO 231	Advanced Typewriting	66
OFO 232	Advanced Shorthand	66
OFO 233	Elementary Accounting	60
OFO 234	Office Practice II	48
OFO 235	Graphic Arts II	60
GRC 133	Shop Management & Supervision	60
		360

FOURTH QUARTER		
OFO 261	Selected Studies in Office Occupations	360
		1,440

PHYSICAL EDUCATION

This department provides opportunities for every student to acquire skill and knowledge in many sports and recreational activities so that each may prepare himself for leisure time enjoyment. Emphasis is placed on individual and recreational activities.

The Intramural Sports Program at Texarkana College is designed to give all students an opportunity to participate in a variety of recreational activities.

Students are urged to follow the degree plan of the college from which they plan to earn a Bachelor's Degree.

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
PSY 111	1	ENG 132	3
ENG 131	3	HST 134 or 132	3
HST 131 or 133	3	BIO 142	4
MTH 135 or 131	3	PHE 132	3
BIO 141	4	PHE 131	3
SPE 131	3	Physical Education	1
Physical Education	1		
	18		17

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
English (sophomore)	3	English (sophomore)	3
BIO 145	4	SOC 131	3
PSI 231	3	PSI 232	3
PSY 231	3	BIO 146	4
Physical Education	1	Physical Education	1
Elective	3	Elective	3
	17		17

PHYSICS

FRESHMAN YEAR

1st Semester	Hours
CHM 141	4
ENG 131	3
MTH 231	3
MTH 136	3
Physical Education	1
EGR 111*	1
PSY 111	1
	16

2nd Semester	Hours
CHM 142	4
ENG 132	3
MTH 232	3
PHY 243	4
Physical Education	1
EGR 112*	1
	16

SOPHOMORE YEAR

1st Semester	Hours
English (sophomore)	3
MTH 233	3
HST 133	3
PHY 244	4
CSI 231	3
Physical Education	1
	17

2nd Semester	Hours
English (sophomore)	3
HST 134	3
PHY 245	4
PSY 231 or Foreign Language	3
CSI 232	3
Physical Education	1
	17

*Suggested, Not Required.

PRE-DENTISTRY

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 141	4	CHM 142	4
BIO 141	4	BIO 142	4
MTH 131	3	MTH 132	3
ENG 131	3	ENG 132	3
HST 133	3	HST 134	3
Physical Education	1	Physical Education	1
PSY 111	1		
	19		18

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
PHY 141	4	PHY 142	4
CHM 241	4	CHM 242	4
BIO 242	4	PSY 231	3
Physical Education	1	Elective	3
PSI 231	3	PSI 232	3
English (sophomore)	3	Physical Education	1
	19		18

PRE-LAW

Students are urged to follow the degree plan of the college from which they plan to earn a Bachelor's Degree.

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
ENG 131	3	ENG 132	3
HST 133	3	HST 134	3
MTH 131	3	MTH 132	3
Science	4	Science	4
SPE 131	3	SPE 132	3
Physical Education	1	Physical Education	1
PSY 111	1		
	18		17

Foreign Language is strongly recommended.

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
English (sophomore)	3	English (sophomore)	3
HST 131	3	HST 132	3
PSI 231	3	PSU 232	3
ECO 231	3	ECO 232	3
SOC 131	3	PSY 231	3
ACC 231	3	ACC 232	3
Physical Education	1	Physical Education	1
	19		19

PRE—MEDICAL

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 141	4	CHM 142	4
BIO 141	4	BIO 142	4
MTH 136	3	MTH 231	3
ENG 131	3	ENG 132	3
Physical Education	1	Physical Education	1
PSY 111	1	HST 134	3
HST 133	3		18
	19		

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 241	4	CHM 242	4
PHY 243	4	PHY 244	4
English (sophomore)	3	Elective	3
PSI 231	3	PSI 231	3
Physical Education	1	Physical Education	1
BIO 242	4	BIO 241	4
	19		19

PRE-VETERINARY MEDICINE

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
AGR 141	4	BIO 144	4
BIO 143	4	CHM 142	4
CHM 141	4	Elective	3
ENG 131	3	ENG 132	3
*MTH 136	3	*MTH 231	3
Physical Education	1	Physical Education	1
PSY 111	1		
	20		18

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
CHM 241	4	CHM 242	4
English (sophomore)	3	PSI 232	3
HST 133	3	HST 134	3
Physical Education	1	Physical Education	1
PHY 141	4	Elective	6
Elective	3		
	18		17

*Students who do not have a strong math background should enroll in Math 131 and 132.

PRINTING

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
PTG 131	3	PTG 134	3
PTG 132	3	PTG 135	3
PTG 133	3	PTG 136	3
ENG 031 or 131	3	ENG 131 or 132	3
SEC 131*	3	EGR 131	3
PSY 111	1		
	16		15

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
PTG 137	3	PTG 234	3
PTG 138	3	PTG 235	3
PTG 231	3	PTG 236	3
PTG 232	3	PTG 237	3
PTG 233	3	Approved Elective**	3
	15		15

*Students with typing proficiency may substitute approved elective.

**Approved Electives: SOC 131, PSY 231, SPE 131, BUA 131

PUBLIC ADMINISTRATION

Students are urged to follow the degree plan of the college from which they plan to earn a Bachelor's Degree.

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
ENG 131	3	ENG 132	3
HST 133	3	HST 134	3
MTH 131	3	MTH 139	3
Science	4	Science	4
SPE 131	3	SPE 132	3
PSY 111	1	Physical Education	1
Physical Education	1		
	18		17

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
English (sophomore)	3	English (sophomore)	3
HST 131	3	HST 132	3
PSI 231	3	PSI 232	3
ECO 231	3	ECO 232	3
STC 131	3	PSY 231	3
MTH 134	3	Physical Education	1
Physical Education	1		
	19		16

RADIO AND TELEVISION REPAIR

The Radio and TV Repair courses require six quarters or eighteen months for completion. The courses are one quarter in length and are all offered each quarter. The instruction is individualized and students in the same shop study different topics. Each course contains 360 hours of instruction with the ratio of lecture to laboratory adjusted as needed. Each student will be required to attend classes in related mathematics, communications, and shop management (60 hours per quarter)* during his initial quarters of enrollment. The student who is capable may test out of studies in some of the related areas. The courses in Radio and TV Repair are:

1st Quarter

RTR 161 Fundamentals of Electricity ..... 360 clock hours

2nd Quarter

RTR 162 Fundamentals of Electronics ..... 360 clock hours

3rd Quarter

RTR 163 Electronic Equipment ..... 360 clock hours

4th Quarter

RTR 164 Black and White Television
Theory and Servicing..... 360 clock hours

5th Quarter

RTR 165 Color Television
Theory and Servicing..... 360 clock hours

6th Quarter

RTR 166 Electronic Systems ..... 360 clock hours

*Students in Radio and TV Repair will take related communications, related mathematics (two quarters), small business management, and applied drafting.

REAL ESTATE

The Real Estate Program is designed to develop a fundamental background in skills and knowledge for immediate practice in the field of Real Estate. Formal classroom study is combined with case studies and actual work experience in order to provide the skills necessary for a career in Real Estate. The curriculum is a terminal two year college program leading to an Associate in Applied Science Degree in Real Estate and is designed to meet licensure requirement for the state of Texas.

REAL ESTATE

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
ENG 031 or 131	3	ENG 131 or 132	3
BUA 130	3	BUA 131	3
RLE 131	3	*RLE 132	3
ACC 131 or 231	3	*RLE 133	3
Approved Elective	3	ACC 231 or 232	3
	—	Approved Elective	3
	15		—
			18

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
*RLE 135	3	*RLE 232	3
*RLE 134	3	*RLE 233	3
ECO 231	3	PSI 231	3
SPE 133	3	PSY 233	3
Approved Elective	3	Approved Elective	3
	—		—
	15		15

*APPROVED ELECTIVES

ACC 232	OFO 133	BUA 233
ECO 232	PSI 232	MTH 133
BUA 234	OFO 238	SOC 131
BUA 235	MGT 235	

*Prerequisite RLE 131

SECRETARIAL STUDIES
(One Year Certificate)

1st Semester	Hours	2nd Semester	Hours
ENG 031 or 131	3	ENG 131 or 132	3
BUA 130 or ACC 131	3	DAP 131	3
SEC 131 or 132	3	SEC 135 or 236 or 237	3
SEC 134 or 135 or 236	3	SEC 132 or 233	3
SEC 138	3	SEC 133	3
PSY 111	1	Physical Education	1
Physical Education	1		16
	17		

SECRETARIAL STUDIES
(Associate Degree)

FRESHMAN YEAR

1st Semester	Hours	2nd Semester	Hours
ENG 131	3	ENG 132	3
*SEC 131	3	SEC 132	3
*SEC 134	3	SEC 135	3
SEC 133	3	SEC 138	3
HST 133	3	HST 134	3
Physical Education	1	Physical Education	1
PSY 111	1		16
	17		

SOPHOMORE YEAR

1st Semester	Hours	2nd Semester	Hours
ENG (Sophomore)	3	ENG (Sophomore) or SPE 133	3
SEC 233	3	PSI 232	3
SEC 236	3	SEC 237	3
ACC 231	3	ACC 232	3
Physical Education	1	Elective	3
	13	Physical Education	1
			16

*Students who have sufficient background in typing and shorthand may begin with advanced courses.

SMALL ENGINE REPAIR

The Small Engine Repair course requires three quarters or nine months for completion. The courses are one quarter in length and all are offered each quarter. The instruction is individualized and students in the same shop study different topics. Each course contains 360 hours of instruction with the ratio of lecture to laboratory adjusted as needed. Each student will be required to attend classes in related mathematics, communications, and shop management (60 hours per quarter)* during each quarter of enrollment. The student who is capable may test out of studies in some of the related areas. The courses in small engine repair are:

1st Quarter

SER 161 ..... 360 Clock Hours

2nd Quarter

SER 162 ..... 360 Clock Hours

3rd Quarter

SER 163 ..... 360 Clock Hours

*Students in Small Engine Repair will take Related Mathematics, Related Communications, and Small Business Management.

SOCIAL SCIENCE
(Associate In Arts Degree)

This program is designed for students who are majoring in Liberal Arts, who do not have a major, or who wish to improve their education. It is chiefly a transfer program; therefore, students should follow the degree plan from the college or university from which they plan to earn a Bachelor's Degree.

FRESHMAN YEAR

1st Semester	Hours
ENG 131	3
HST 133	3
Foreign Language	3-4
Science	3-4
Mathematics	3
PSY 111	1
Physical Education	1
	17-19

2nd Semester	Hours
ENG 132	3
HST 134	3
Foreign Language	3-4
Science	3-4
Mathematics	3
Physical Education	1
	16-18

SOPHOMORE YEAR

1st Semester	Hours
English (sophomore)	3
PSI 231	3
Foreign Language or Elective	3
Electives	6
Physical Education	1
	16

2nd Semester	Hours
English (sophomore)	3
PSI 232	3
Foreign Language or Elective	3
Electives	6
Physical Education	1
	16

TRUCK DRIVING
Commercial Driver Training

Entrance Requirements

A student must be able to read and understand Department of Transportation safety regulations and have writing ability to complete logs, manifests, bill of ladings, etc. Each applicant must be of good character, mentally alert, and physically qualified. Enrollment is open to all students above the age of 18 if they have no school connections; however, Department of Transportation regulations require drivers to be 21 years of age before driving interstate. All students must have been out of high school at least 10 calendar months prior to enrollment in the event they did not complete high school.

Each student must obtain a physical examination as required by the Department of Transportation and a Commercial Drivers License before he/she will be admitted. It will also be the student's responsibility to furnish Texarkana Community College with a current motor vehicle driving record report. Physical examination forms and driving record request forms are available at the College.

The prospective student should also keep in mind that motor carrier companies are required to perform a security investigation on all prospective employees. The security check is not a requirement for admittance to the driving program, however, conviction for theft or use of narcotics may disqualify a graduate of the program from employment with a motor carrier. Individual questions about the security investigation can be directed to the Business Division Chairman, Texarkana Community College.

Cost of Course

The total cost to each student for this program is $400.00 and is payable in full at the time of registration.

This program is approved for Veterans Education Benefits. Additional information concerning such benefits is available in the Veterans Affairs Office on campus.

Refund Policy

If a student offically withdraws from the program no later than the 2nd day of class he/she will receive a refund of 100% of the fees paid. If a student withdraws on the 3rd or 4th day of class, 50% of the fees will be refunded. After the 4th day of class, no refund will be made.

Class Schedule

Classes will meet five days a week for seven weeks. The daily schedule will consist of approximately three hours of classroom instruction and approximately five hours to be spent on the practice field and/or on the road.

Upon successful completion of the instructional objectives, a certificate evidencing such completion will be awarded.

Placement

Texarkana Community College does not guarantee jobs for graduates. The college does, however, make every effort to assist students in obtaining employment after graduation. In some instances motor carrier companies recruit drivers directly from the college.

Curriculum

CTD 161 — Commercial Truck Driving. This is a 280 clock hour class, that meets eight hours per day for seven weeks. Instruction includes Department of Transportation regulations, maneuvering truck tractors, shifting patterns, safety, road exercises, loading and weight distribution, backing, servicing, and other skill training related to safely driving large rigs. This will also include skill training at night and in all weather conditions.

WELDING

The welding course requires six quarters or eighteen months for completion. The courses are one quarter in length and all are offered each quarter. The instruction is individualized and students in the same shop study different topics. Each course contains 360 hours of instruction with the ratio of lecture to laboratory adjusted as needed. Each student will be required to attend classes in related mathematics, communications, and small business management (60 hours per quarter)* during each quarter of enrollment. The student who is capable may test out of studies in some of the related areas. The courses in welding are:

1st Quarter

WEL 161 ..... 360 Clock Hours

2nd Quarter

WEL 162 ..... 360 Clock Hours

3rd Quarter

WEL 163 ..... 360 Clock Hours

4th Quarter

WEL 164 ..... 360 Clock Hours

5th Quarter

WEL 165 ..... 360 Clock Hours

6th Quarter

WEL 166 ..... 360 Clock Hours

*Students in welding will take Related Communications, Related Mathematics (two quarters), Small Business Management, and Applied Drafting.

COURSE DESCRIPTIONS

Accounting

ACC 131 **Elementary Accounting** (3,3,0). First Course. An introduction to bookkeeping and accounting in which the principles of double-entry bookkeeping are studied. Emphasis is given to each phase of the accounting cycle as the principles are applied to the single proprietorship type of business organization. (non-transferable)

ACC 231 **Principles of Accounting I** (3,3,0). An introductory course designed to furnish a general knowledge of accounting principles and procedures. Examination of present accounting theory and practices with applications to the sole proprietorship. (Meets 4 hours per week)

ACC 232 **Principles of Accounting II** (3,3,0). Continuation of Accounting 231. Application of theory and pracitce to partnerships and corporations, manufacturing operations, cost determination, and financial statement analysis. Prerequisite: ACC 231 (Meets 4 hours per week)

Agriculture

AGR 131 **Introduction to Agricultural Economics** (3,3,0). A study of basic economic concepts and principles and their application to agricultural problems. (3 hours lecture)

AGR 244 **Ecological Principles of Wildlife and Natural Resources** (4,3,3). Introduction to ecological principles underlying the conservation and management of natural resources with major emphasis on wildlife. Topics considered include basic concepts of ecology including ecosystem organization, population dynamics, habitat requirements of different species, and management techniques required to maintain a healthy ecosystem. (3 hours lecture, 3 hours laboratory)

AGR 132 **Dairy Science** (3,3,2). A survey of the dairy industry, dairy breeds, standards for selection and culling, feeding, management, and health maintenance. Food value of milk, tests for composition and quality, utilization and processing of market milk and dairy products. (3 hours lecture, 2 hours laboratory)

AGR 143 **Food and Fiber Crops** (4,3,3). Study of classifications, distribution and utilization of agronomic crops and the influence of environmental factors on their growth and development. Recommended cultural practices. (3 hours lecture, 3 hours laboratory)

AGR 141 **Introductory Animal Science** (4,3,3). An introductory course stressing the importance of the livestock and meat industry. Emphasis on selection, breeding, feeding, management, and marketing of beef cattle, swine, sheep, Angora goats, and horses. (3 hours lecture, 3 hours laboratory)

AGR 234 **Breeds of Livestock** (3,3,0). A detailed study of the history, development, and breed characteristics of the breeds of beef cattle, swine, sheep, goats, and horses, along with their adaptation, distribution and breed organizations and their improvement programs. Current trends in selection and evaluation. (3 hours lecture)

AGR 235 **Avian Science** (3,3,2). Introduction to the poultry industry. Application of principles and practices in the production and marketing of poultry and poultry products, including game birds. (3 hours lecture, 2 hours laboratory)

AGR 236 **Principles of Horticulture** (3,3,2). Study of structure, growth, development, maintenance, and use of horticultural plants. Propagation principles, greenhouse production, and practice in propagation techniques. (3 hours lecture, 2 hours laboratory)

AGR 237 **Forages** (3,3,2). The identification, characteristics, and adaptability of grasses and legumes of the South. Pasture management including the basics of planting, establishing, maintenance, grazing, and harvesting of forages. Prerequisite: AGR 143 or consent of instructor (3 hours lecture, 2 hours laboratory)

AGR 241 **Soil Science** (4,3,3). A study of the formation, classification, physical, chemical and biological properties of soils. Prerequisite: Chemistry 141 or concurrent enrollment. (3 hours lecture, 3 hours laboratory)

Air Conditioning and Refrigeration

ACR 161 **Basic Electricity** (6,5,25). Ohm's law, basic wiring of switches, relays; principles of electric motors, single phase and three phase; principles of transformers, capacitors and inductors; reading and drawing electric wiring diagrams; study of magnetism and trouble shooting practices.

ACR 162 **Basic Refrigeration and Air Conditioning Theory** (6,5,25). Instruction in copper tubing handling, soldering, brazing, bending, flaring, swagging; duct systems and air flow; compressor construction, dismantling, repair; introduction to arc and acetylene welding: basic installation and service on simple domestic refrigerators; shop safety.

ACR 163 **Heating** (6,5,25). Electric and gas fired forced air heating systems; hot water heating systems; boilers, boiler controls and piping; heating layout procedures, contracting; service practices; business practices and ethics.

ACR 164 **Residential Air Conditioning** (6,5,25). Programmed instruction in window units; domestic air conditioning systems; domestic duct work systems; air balancing, automobile air conditioning; domestic air conditioning control systems; use of psychrometric chart; psychrometric problems in comfort cooling.

ACR 165 **Commercial and Industrial Air Conditioning I** (6,5,25). Programmed instruction in direct expansion air conditioners; large duct systems; condensing units, air handlers, water chillers; piping systems; capacity control; air distribution, and cooling systems, pneumatic control systems; electronic control systems; installation, service, and maintenance, absorptions systems; heat pumps; electronic air filters; fans and blowers; noise control.

ACR 166 **Commercial and Industrial Air Conditioning II** (6,5,25). Instruction in servicing meat, produce, dairy cases; open-type freezers; walk-in freezers and coolers; air screens, technique in handling heavy equipment; designing and servicing defrost systems; maintenance and service on cooling towers and water-cooled condensers, amonia systems; cascade systems; dairies; truck refrigeration, reverse cycle defrost; and ice makers.

Air Technology

AIR 121 **Primary Flight** (2,.4,1.5). A specific introduction to flight through actual flying experience in modern, safe, fully equipped aircraft. 35.5 hours of instruction is provided of which 24 hours is spent in dual and solo flight, and 11.5 hours in oral instruction and briefing. This course qualifies a student for solo flight. It also includes maximum performance take-offs and landings, night flight, and VOR orientation. This course is designed for those who wish to begin training toward qualifying for a Federal Aviation Administration Private Pilot Certificate; also for Aero Technology students who merely desire to achieve the fundamental, practical experience of flight and first-hand knowledge of aircraft operation.

AIR 122 **Basic Flight** (2,.4,1.5). This course is a continuation of AT 121. At the completion of this course the student may elect to take the Private Pilot Flight Test. The course provides 34.1 hours of instruction, of which 24 hours is in dual and solo flight and 10.1 hours of oral instruction and briefings. The course includes dual and solo cross-country operation, private pilot operation, and two phase checks. Prerequisite: AIR 121 and AIR 133

AIR 123 **Commercial Flight I** (2,.6,2.4). This is the first of six (6) courses of flight training for the Federal Aviation Administration Commercial Pilot Certificate with Instrument and Multi-engine Commercial ratings. A total of 50.1 hours of instruction is provided, including 16.2 dual, 21.0 solo, and 12.9 hours of oral instruction and briefings. Areas of which includes basic maneuvers by visual aid and instrument reference, precision-commercial maneuvers, and a final stage check. Prerequisite: AIR 122 or Equivalent, Co-Requisite: AIR 135

AIR 114 **Commercial Flight II** (1,.4,.8). This course includes Stage II, Lessons 19 through 23 of the flight training syllabus. The course provides 26.1 hours of instruction, 13.0 dual and 13.1 oral. Included in this stage is procedures and airport operations. At the completion of this course you may elect to take the Private-Multi-Engine flight test. Prerequisite: AIR 114, and 135 Co-Requisite: AIR 135 or 232

AIR 225 **Commercial Flight III** (2,.5,2.0). This course includes Stage III, advanced cross-country and night operations. Stage III provides 42.9 hours of instruction, 10.3 dual, 22.4 solo, and 10 hours of oral briefings. Prerequisite: AIR 114, or equivalent, AIR 232 Co-Requisite: AIR 236, and AIR 232

AIR 226 **Instrument Flight I** (2,.4,1.5). This course includes Stage I & II Lessons 26 thru 32, of the instrument phase of training. The course provides 35.1 hours of instruction, 16 dual, 7 solo, and 12.1 oral. Areas of instruction include attitude instrument flying, radio navigation, and 2 progress checks. Prerequisite: AIR 123, or equivalent, AIR 232 Co-Requisite: AIR 238

AIR 217 **Instrument Flight II** (1,.4,1.4). Stage III includes Lessons 33 thru 37, which provides 32.6 hours of instruction, 12,2 dual, 9.8 solo, and 10.6 oral. Areas of instruction include: Holding, VOR, ADF, and ILS approaches and a phase check. Prerequisite: AIR 238 or 226 Co-Requisite: AIR 238

AIR 228 **Commercial-Instrument I** (2,.6,2.2). This course includes the final preparation prior to taking the flight tests for a Commercial Certificate, instrument and Multi-Engine Commercial ratings. Stage IV of the Instrument phase and Stage IV of the

Commercial Phase, Lessons 38 through 44 are included. The course provides 47.9 hours of instruction, 14.5 dual, 20.8 solo, and 12.6 oral. Areas of instruction will include IFR enroute and emergency procedures. Commercial maneuvers, single and multi-engine and the required progress checks. Prerequisite: AIR 135, 232, 236, 238, 217 Co-Requisite: AIR 238

AIR 221 **Flight Instructor** (2,.5,2.0). This flight course prepares the experienced pilot for the Federal Aviation Administration Flight Instructor Certificate for Airplanes. A total of forty hours of instruction is provided, including 8 hours of oral flight instruction, 25 hours of dual instruction. Stage I & II, Lessons 1 thru 21, Flight Instructor Airplane, Single Engine, Flight Training Syllabus. Prerequisite: Unrestricted Commercial Certificate Co-Requisite: AIR 237

AIR 216 **Instrument Flight Instructor** (1,.3,1.0). A course designed to develop a student instructor's aeronautical skill and experience necessary to meet the requirements for a flight instructor certificate with instrument-airplane rating as specified in Parts 61 and 141 of the Federal Air Regulations. The course includes 33.2 hours of instruction. This includes 20 hours of flight instruction, 10 of which is given by the student instructor to another student to gain actual experience. This is done under the direct supervision of an Instrument Flight Instructor. Stage I & II, Lessons 1-15, of the Flight Instructor Instrument, Airplane Flight Training Syllabus. Prerequisite: Permission of Chief Flight Instructor

AIR 219 **Multi-Engine Flight Theory** (1,2,1,0). A course designed to prepare the professional Flight Instructor to instruct in a modern light twin engine aircraft. Stage I develops the student instructor's ability to perform the required flight training procedures and maneuvers with the competency of a commercial pilot. Stage II develops the student instructor's ability to develop effective lesson plans appropriate to the student involved, and the pilot operations being covered. The student gains actual experience by instructing another student under the supervision of a qualified Multi-Engine Flight Instructor. Stage I & II, Lessons 1-18, of the Professional Flight Instructor Airplane, Multi-Engine, Flight Training Course. Prerequisite: Permission of Chief Flight Instructor Co-Requisite: AIR 218

Air Technology
(Ground Training Courses)

AIR 131 **Aircraft Science** (3,3,0). 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 of aircraft construction and design. Prerequisite: None

AIR 132 **Propulsion Systems** (3,3,0). This course introduces to the student the propulsion and its operation. Typical operational type power plants are available for study. Prerequisite: None

AIR 133 **Preflight** (3,3,0). The principles of flight, basics of air traffic control, weather facts, navigational procedures and airplane operation as are pertinent for the Private Pilot, upon successful completion of this course, the student has sufficient knowledge to pass the Federal Aviation Administration written examination for the Private Pilot Certificate. Stage I thru V, Lessons 1 thru 15, Private Ground Training Syllabus. Prerequisite: None.

AIR 135 **Aerophysics** (3,3,0). This is the first of three commercial ground schools. The course introduces physics, physical terms, basis for physical laws in practical application to aeronautics, aircraft performance charts, weight and balance determination, multi-engine operations and procedures, and aviation safety. This course includes Stage I, III, and VI, Lessons 16 thru 19, 28 & 29, 34 & 35 in the Commercial Ground Training Syllabus. Prerequisite: None

AIR 218 **Multi-Engine Instructor Theory** (1,1,0). This course is designed to meet the prerequisites specified in Parts 61 and 141 of the Federal Air Regulations for the Flight Instructor Airplane, Multi-Engine added instructor rating. Instruction will be to develop the student instructor's understanding of the safe operation of light twin-engine airplanes, including airplane performances, limitation, engine out considerations and emergency situations. Stage II will develop the student instructor's understanding of, and how to perform pertinent flight training maneuvers and procedures. Stage I & II, Lessons 1 thru 11 of the Flight Instructor's Airplane, Multi-Engine, Ground Training Course. Prerequisite: Permission of Chief Flight Instructor

AIR 232 **Meteorology** (3,3,0). This course aims to present conscisely and systematically the science of meteorology in its present stage of development. The primary purpose is to set forth the facts and principles concerning the behavior and response of the atmosphere. Prerequisite: None

AIR 236 **Commercial Navigation** (3,3,0). The basic elements of air navigation, computer and plotter, aeronautical charts, Federal Aviation Administration regulations, Federal Aviation Administration publications pertinent to the Commercial Pilot Certificate at the completion of the course, the student will take the Commercial Pilot-Airplane Federal Aviation Administration written examination. Stage II, V, VII, VIII, Lessons 20 thru 27, 32 & 33, 36 thru 40, of the Commercial Pilot Ground Training Syllabus. Prerequisite: AIR 135, 232 Co-Requisite: AIR 135, 232

AIR 237 **Instruction Theory** (3,3,0). This course prepares the enrollee for the instructor-written examination given by the Federal Aviation Administration. Two main topics are fundamentals of instruction and analysis of maneuvers. Federal Aviation Administration Publications, such as Flight Instructor's Handbook, Airman's Information Manual, Flight Training Manual and pertinent advisory Circulars are studied. Stage I & II, Lesson 1 thru 17, of the Flight Instructor Airplane, Single Engine, Ground Training Syllabus. Prerequsite: Chief Flight Instructor's permission.

AIR 238 **Instrument Navigation** (3,3,0). 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 Directional Finding (DF) and others. Charts and approach plates as adopted to radio navigation including the use of the Airman's Information Manual. Stage I & II, Lesson 41 thru 53, Ground Training Syllabus-Instrument Phase. Co-Requisite: AIR 232

AIR 239 **Instrument Flight Instructor Theory** (3,3,0). This course is designed to prepare the Professional Flight Instructor for the instrument flight instructor written and oral examination. Areas of instruction will develop the student instructor's understanding of the fundamentals of learning and teaching procedures, testing and evaluation, weather, aero-dynamics, flight instruments, electronic aids to instrument flying, airspace, air traffic control, emergencies, and aviation safety. 48 hours of instruction is provided, 5 hours of which will be performed by the student instructor. Stage I, II, III, Lessons 1 thru 18, Flight Instructor Instrument, Airplane, Ground Training Syllabus.

Anthropology

ANT 131 **Introduction to Anthropology** (3,3,0). Fields, theories, and methods of anthropology; man's biological and cultural development; survey of technical, economic, political, social, religious, and linguistic systems with an emphasis on historical impact.

Art

ART 131 **Basic Drawing** (3,3,0). A fundamental course investigating a variety of media, techniques, and subjects, exploring perceptual and descriptive possibilities. This course includes the careful study of visual perception.

ART 132 **Drawing** (3,3,0). Expansion of Drawing I stressing the expression and conceptual aspects of drawing including the human figure. The solving of total compositional problems through the drawing mediums.

ART 133 **Design I** (3,3,0). Emphasis upon two-dimensional design; includes the fundamentals of line, color, form, texture, shape, space, and arrangement. A foundations course structured to solving compositional problems through various mediums such as drawing, painting, and forms of sculpting. Emphasis is placed on exhibitable final products.

ART 134 **Design II** (3,3,0). A continuation of ART 133 with emphasis on three dimensional concept. Solving of compositional problems. Study of inter-relational ideas between sculpture, drawing, print-making, and painting. Prerequisite: ART 133

ART 135 **Public School Art** (3,3,0). The teaching of Public School Art for secondary and elementary grades. Training in use of various media such as water colors, tempera, charcoal and acrylic.

ART 136 **Public School Art** (3,3,0). This course is designed for elementary and secondary teachers and offers projects for those interested in art as a teaching field. Emphasis on elementary design, color, 3-dimensional construction, fiber art and lettering and poster boards.

ART 137 **Art Appreciation** (3,3,0). This is a course on the appreciation of art. The content is based on looking at works of art. The objective of this is to broaden and enlighten the cultural background of the student.

ART 138 **Art History Survey I** (3,3,0). A survey of painting, sculpture, architecture, and minor arts from prehistoric times to the 14th century.

ART 139 **Art History Survey II** (3,3,0). A survey of painting, sculpture, architecture, and minor arts from the 14th century to the present.

ART 231 **Sculpture I** (3,3,0). An exploration of various sculptural approaches in a variety of media including additive and subtractive techniques. (3 hours lecture, 3 hours laboratory) Prerequisite: Sophomore standing or instructor's approval.

ART 232 **Sculpture II** (3,3,0). A continuation of Art 231, sculpture, with more emphasis on individualized work. The student can select for himself the type of sculpture he wishes to engage in — additive and subtractive. (3 hours lecture, 3 hours laboratory)

ART 233 **Elementary Painting** (3,3,0). A disciplined study of the use of the acrylic and oil. Color mixing, methods of application on canvas and panels using still life and landscape subjects. Exploring the potentials of painting media with emphasis on color and composition. (3 hours lecture, 3 hours laboratory)

ART 234 **Elementary Painting** (3,3,0). Continuation of Art 233. Advanced techniques in acrylic, oil and water color painting. Landscape, figure and character studies. (3 hours lecture, 3 hours laboratory)

ART 235 **Weaving I** (3,3,0). Weaving on several types of hand looms. A study of color, texture, and design in basic two-harness techniques, and experimental use of various fibers. (3 hours lecture, 3 hours laboratory)

ART 236 **Weaving II** (3,3,0). With an introduction of four-harness techniques (3 hours lecture, 3 hours laboratory)

ART 238 **Ceramics** (3,3,0). Creating pottery forms by use of the slab, pinch, coil, and throwing methods; firing and glazing. (3 hours lecture, 3 hours laboratory)

ART 239 **Ceramics** (3,3,0). Continuation of Ceramics 238 with original glaze experiments in clay. (3 hours lecture, 3 hours laboratory)

Astronomy

AST 141 **Introduction to Astronomy** (4,3,3,). A journey through the Solar System. Begin with the history of Astronomy and cover such topics as the Sun, Earth, Moon, Planets, Comets, Meteors, and Asteroids. Recent developments and discoveries are presented. Star maps, telescopes, and sky observations are stressed in lab.

AST 142 **Introduction to Astronomy** (4,3,3). A journey through the entire Universe. Begin with the sun and study the life and death of stars. Included are Nebulae, Pulsars, Quasars, White Dwarfs, and Black Holes. The beginnings of the Universe and UFO's are touched upon.

Auto Body Repair Mechanics

ABR 161 **Basic Body Shop** (6,5,25). This course is a study of shop safety, shop practices, use of the basic hand and power tools, and techniques of bending, shrinking, cutting and welding metals.

ABR 162 **Minor Body Repair** (6,5,25). This course is a study of the principles and service techniques for doors, locks, metal trim, and automotive glass. The study of the basic techniques for use of plastics is begun.

ABR 163 **Major Body Repair** (6,5,25). This course is a study of principles and techniques for repair of major damage to fenders, panels, quarter panels, hoods, trunk lids and bumpers.

ABR 164 **Automotive Body Refinishing** (6,5,25). This course is a study of principles and techniques used in preparation of metal surfaces for painting and the painting of metal surfaces. Included is a study of paint composition and primers.

ABR 165 **Advanced Body Shop** (6,5,25). This course is a study of the repair of automobiles which have undergone major damage. Included is a study of the use of commercial and fast production techniques.

Automotive Mechanics

AUM 161 **Engine Maintenance and Overhaul** (6,5,25). This course is a study of the design, construction, disassembly and overhaul of internal combustion engines.

AUM 162 **Engine Systems and Tune-Up Practices** (6,5,25). This course is a study of engine cooling systems, fuel systems, ignition systems, emission and exhaust systems. Also included will be tune-up, diagnosis and auto electrical fundamentals.

AUM 163 **Chassis and Suspension Maintenance** (6,5,25). This course is a study of chassis and suspension maintenance, steering sytems, and front end alignment.

AUM 164 **Drum and Disc Brake Systems** (6,5,25). This course is a study of the theory of operation and service of drum and disc brakes.

AUM 165 **Electrical Systems and Air Conditioning** (6,5,25). This course is a study of electrical and air conditioning theory and the proper use of testing equipment in diagnosing and correcting malfunctions in alternators, generators, starters, switches, compressors, and controls.

AUM 166 **Power Train Maintenance and Assembly of Standard and Automatic Transmissions** (6,5,25). This course is a study of the operating principles and service of transmissions. Also included are the assembly of standard transmissions, clutches, drive lines, differentials, and axles.

Automotive Technology Apprenticeship

AAP 161 **Engine Maintenance and Overhaul** (6,6,0). This course is a study of the design, construction, disassembly and overhaul of internal combustion engines.

AAP 162 **Engine Systems and Tune-Up Practices** (6,6,0). This course is a study of engine cooling systems, fuel systems, ignition systems, emission and exhaust systems. Also included will be tune-up, diagnosis and auto electrical fundamentals.

AAP 163 **Chassis and Suspension Maintenance** (6,6,0). This course is a study of chassis and suspension maintenance, steering systems, and front end alignment.

AAP 164 **Drum and Disc Brake Systems** (6,6,0). This course is a study of the theory of operation and service of drum and disc brakes.

AAP 165 **Electrical Systems and Air Conditioning** (6,6,0). This course is a study of electrical and air conditioning theory and the proper use of testing equipment in diagnosing and correcting malfunctions in alternators, generators, starters, switches, compressors, and controls.

AAP 166 **Power Train Maintenance and Assembly of Standard and Automatic Transmissions** (6,6,0). This course is a study of the operating principles and service of transmissions. Also included is the assembly of standard transmissions, clutches, drive lines, differentials, and axles.

AAP 131 **Internship** (3,1,40). The internship sections of the Automotive
132 Technology Apprenticeship program will be taught in the
133 shops of the Texarkana New Car and Truck Dealers Associa-
134 tion.
135 Assignments will be made to the student to match the
136 course section being taught on campus at any given time. Monitoring of these assignments will occur through the staff of Texarkana Community College with the cooperation of each dealer.

Biology

BIO 141 **General Biology** (4,3,3). An introductory course in biology. Topics of study include problem solving by means of the scientific method, cellular structure, and physiology, the chemistry of life, a survey of the monera, protista, fungi, plants, and animals. Course requires three hours lecture and three hours laboratory per week.

BIO 142 **General Biology** (4,3,3). An introductory course in biology. Topics include a study of all human systems and physiology, genetics, evolution, and ecology. Course requires three hours lecture and three hours laboratory per week.

BIO 143 **General Botany of Seed Plants** (4,3,3). The seed plant as a living unit; external and internal structures in relation to life processes, reproduction and life history; economic and ecological significance. (3 hours lecture, 3 hours laboratory)

BIO 144 **General Zoology** (4,3,3). An introduction to the field of animal biology. A survey of the animal kingdom with emphasis on animal life systems, heredity and ecology. (3 hours lecture, 3 hours laboratory)

BIO 145 **Anatomy and Physiology** (4,3,3). The first in a two-course series dealing with anatomy and physiology of the human body. This course is recommended for nurses, medical technicians, physical education majors, and other interested persons. (3 hours lecture, 3 hours laboratory)

BIO 146 **Anatomy and Physiology** (4,3,3). The second in a two-course series dealing with anatomy and physiology of the human body. This course is recommended for nurses, medical technicians, physical education majors, and other interested persons. (3 hours lecture, 3 hours laboratory).

BIO 241 **Comparative Vertebrate Anatomy** (4,3,3). Comparative embryology, anatomy, and physiology of vertebrate organ systems; adaptions; evolutionary history of the vertebrate. (3 hours lecture, 3 hours laboratory)

BIO 242 **Microbiology** (4,3,3). A study of the characteristics and activities of miro-organisms and their relations to health and disease. An introduction to pathogenic organisms with major emphasis on history, morphology, infection, control, immunization and techniques. (3 hours lecture, 3 hours laboratory)

BIO 243 **Insects and Man** (4,3,3). A study of the biology of insects harmful to man and his plants and animals. Life cycles, methods of attack, nature of damage, and methods of control. Use of collections and mounts of insects in laboratory practice. (3 hours lecture, 3 hours laboratory)

BIO 244 **Ecological Principles of Wildlife and Natural Resources** (4,3,3). Introduction to ecological principles underlying the conservation and management of natural resources with major emphasis on wildlife. Topics considered include basic concepts of ecology including ecosystem organization, population dynamics, habitat requirements of different species, and management techniques required to maintain a healthy ecosystem. (3 hours lecture, 3 hours laboratory)

Business Administration

BUA 130 **Business Mathematics** (3,3,0). The application of arithmetic processes to particular business problems. Topics include fractions, decimals, percentages, proportion, interest, discounts, payrolls, depreciation, insurance, and taxes.

BUA 131 **Introduction to Business** (3,3,0). A general survey of the entire field of business. Analysis of the role and scope of business within the free enterprise system. Concepts of business organization, structure, and decision-making process. Explores areas of specialization and career opportunities in the business world.

BUA 233 **Business Law I** (3,3,0). The development of nature and source of law, general principles of the law of contracts, commercial paper and agency. Prerequisite: Sophomore standing.

BUA 234 **Business Law II** (3,3,0). A continuation of the principles of law, including the law of real and personal property, sales, partnerships, corporations, torts, bankruptcy, and other legal subjects. Prerequisite: BUA 233

BUA 235 **Personal Finance** (3,3,0). An analysis of financial problems as related to individuals and households. Topics covered include household budgets and budgetary control; bank accounts; consumer credit; personal investments; insurance; home ownership vs. renting; wills; trusts; consumer information and protection, and other selected topics.

BUA 238 **Management Principles** (3,3,0). Fundamentals of administrative, staff, and operative management. Development of principles and techniques in organization structure, business objectives, and policy determination, executive functions, leadership, and effective presentations.

Chemistry

The Chemistry Department offers courses leading to a bachelor's degree in chemistry. The chemistry courses are generally required of many pre-professional majors, such as pre-medical science, pre-veterinary medicine, pre-dental science, and pre-pharmacy science. In each case, the student should consult the catalog at the senior institution he expects to attend for specific requirements. Suggested freshman and sophomore courses leading to a bachelor's degree in chemistry are as follows:

CHM 141 **General Chemistry** (4,3,3). Topics of study include fundamental principles of theoretical and applied chemistry, stoichiometry, atomic structure, periodic arrangement of elements, ionic and covalent bonding, gases, liquids, and solids. (3 hours lecture ahd 3 hours of laboratory)

CHM 142 **General Chemistry** (4,3,3). Fundamental principles of theoretical and applied chemistry. Topics of study include acid-base theory, kinetics, equilibrium, thermochemistry, electrochemistry, nuclear chemistry, qualitative analysis, colloids and the structures of organic molecules. (3 hours lecture, 3 hours of laboratory) Prerequisite: Chemistry 141

CHM 143 **Introductory Chemistry** (4,3,3). Topics of study will include the physical properties of matter, chemical equations, stoichiometry, atomic structure, isotopes, molecular structure, ionic bonding, covalent bonding, the naming of compounds, gases, liquids, solids, solutions, osmosis, colloids, acid-base theory, pH, electrochemistry, and a brief study of the functional groups of organic molecules. (3 hours lecture and 3 hours laboratory per week)

CHM 147 **Introductory Organic Chemistry** (4,3,3). A study of basic organic chemistry. Topics of study include the chemistry of carbon compounds such as proteins, lipids, carbohydrates, nu-

cleic acids, steroids, hormones, and enzymes. Selected topics in metabolism and blood chemistry. (3 hours lecture, 3 hours laboratory)

CHM 241 **Organic Chemistry** (4,3,4). Topics of study include classification, structure, nomenclature, methods of preparation, and standard reactions of alkanes, alkenes, alkynes, cyclic aliphatic hydrocarbons, arenes, alcohols, ethers and their derivatives. (3 hours lecture, 4 hours laboratory) Prerequisite: Chemsitry 141 and 142

CHM 242 **Organic Chemistry** (4,3,4). Topics of study include classification, structure, nomenclature, methods of preparation, and standard reactions of carboxylic acids, sulfonic acids, amines, diazonium salts, aldehydes, ketones, carbohydrates, proteins, polyhydroxy compounds, heterocyclic compounds, and their derivatives. (3 hours lecture, 4 hours of laboratory) Prerequisite: Chemistry 241

CHM 253 **Quantitative Analysis** (5,3,5). The theory and practice of fundamental quantitative and anlytical procedures. Special emphasis on the development of laboratory techniques. (3 hours lecture and 5 hours of laboratory) Prerequisite: Chemistry 141 and 142

Commercial Electronics

CET 161 **Fundamentals of Electricity I** (6,4,5). A study of sources of electricity resistance, current, voltage, Ohm's law, conductors, insulators, resistors, capacitors, magnetism, relays, direct and alternating current motors. Also shop procedures and safety will be covered.

CET 162 **Fundamentals of Electronics I** (6,4,5). Review of mathematics and basic electricity, test equipment familiarization, multimeter, oscillators, etc. Principles of vacuum tube rectifiers, electron emission and construction of diode rectifiers, power supply filters, voltage dividers, limiting circuits, multi-element tubes, Bias, class and coupling of amplifiers, introduction to Binary, application of electronics and introduction to transistors and integrated circuits. Prerequisite: CET 131

CET 131 **Fundamentals of Electricity II** (3,2,2). This is a continuance of CET 161 so that students will receive a minimum of 208 clock hours of instruction in both CET 161 and CET 131 concerning the fundamentals of electricity.

CET 132 **Fundamentals of Electronics II** (3,2,2). Continuation of CET 162, test equipment usage basic transmitter, basic receiver, and transistor theory. Prerequisite: CET 162

CET 163 **Electronic Test Equipment I** (6,6,3). Certain math theories will be reviewed, practical work with all types current, voltage, and resistance indicating devices. Prerequisite: CET 132

CET 133 **Electronic Test Equipment II** (3,2,2). Continuation of CET 163, advance usage of electronic measuring devices. Prerequisite: CET 163

CET 134 **Standards of Workmanship** (3,3,1). Study of the levels of workmanship in fabrication of electronic components and assemblies. Standards of bonding connections on electronic components, soldering connections, soldering inspections.

CET 135 **Soldering Electrical Connections** (3,2,1). Study of solders, types and proper use. Study of fluxes, chemical composition and use. Practical applications to various types of printed circuit boards, terminals, hook type, eye type, hollow and current connections. Correct wire stripping, timing and contour soldering.

CET 141 **Basic Transistors** (4,2,3). This course is taught at the technician level and is designed to acquaint the student with the transistor. Specific atention is given to atomic structure, semiconductor doping, P-N junctions and the junction transistor. Solid state physics will be discussed. Prerequisite: advance standing in electronics

CET 164 **Trouble Shooting Transistorized Equipment** (6,6,3). A study of the logical explanation of how to service basic transistorized equipment, discussion of transistor circuits and how they are serviced, power supplies, oscillators, series and shunt regulators, etc. Prerequisite: CET 141

CET 136 **Intro to Integrated Electronics** (3,0,3). This course is designed to provide a useful combination of theoretical and practical information concerning some of the more commonly used types of linear 1 c's. Prerequisite: CET 164

CET 165 **Linear and Digital Integrated Circuits** (6,4,5). This course begins by investigating the characteristics of integrated circuit constructions and components. Specific, operation, characteristics, applications and testing of various logic types will be covered. Prerequisite: CET 136

Computer Science

CSI 131 **Digital Computer Principles** (3,3,0). An introduction to digital computer methods of computation, other number systems, symbolic logic, mechanization of storage, timing, arithmetic methods, control, communication with the computer, error (detection and reduction), Boolean Algebra. Course meets three times each week with laboratory as needed.

CSI 231 **Digital Computer, Programming and Problem Solution** (3,3,3). Topics discussed are: Memory, number systems, computer devices, logic, algorithmic processes, and flow diagrams. The solution of problems for mathematics, engineering, business, chemistry, and physics is an integral part of the course. Languages used are Fortran and Basic. The course is designed to meet the needs of business, computer science, engineering, mathematics, and science students. Each student will have hands-on time on the computer. (3 hours lecture, 3 hours laboratory per week)

CSI 232 **Numerical Methods for the Digital Computer** (3,3,3). The course is designed to teach elementary numerical methods and problems solution using the digital computer to students of Engineering, Mathematics, and Science. Each student will have hands-on computer time. Prerequisite: CSI 231 or permission of instructor and MTH 231. Co-requisite: Enrollment in MTH 232. (3 hours lecture, laboratory as needed)

Credit Union Management

CRU 131 **Principles of Credit Union Operations** (3,3,0). This course contains the historical background and philosophy of the credit union movement. Facts, figures, dates, and significant persons related to the movement are included. The organization and function of credit unions, ethics, professionalism, and credit union relationships are discussed. Discussions will be held of the primary differences in principles, organization and management of State Chartered vs. Federally Chartered Credit Unions. Three lecture hours per week. Three semester hours.

CRU 132 **Principles of Credit Union Management and Marketing** (3,3,0). A systematic study of risk managment and insurance as applied to credit unions and their members. Additionally, the basic principles of sound management as applied to people and office routines will be reviewed. The facts and principles of credit union marketing; discussion and analysis of activities such as planning strategy and developing a marketing pro-

gram. Discussion of the marketing concept and structure; marketing information and buyer behavior; consumer and intermediate customer buying behavior and channels of distributing promotions and pricing. Three lecture hours per week. Three semesters hours.

CRU 231 **Advanced Credit Analysis** (3,3,0). Topics include business, government, and foreign credit functions and the control of credit operations. The techniques of credit decision making are studied in detail; the methods of financial analysis such as ratio claculations, cash flow through case methods applied to the solution of business problems. Operation emphasis will be placed on consumer credit, installment loans and real estate loans, particularly FHA Title-I, and home improvement loans. Some discussion will be given to long term mortgage lending, risk appraisal is also studied in the light of general economic conditions. Three lecture hours per week. Three semester hours.

CRU 232 **Collection Principles and Financial Counseling** (3,3,0). The principles of credit extensions, collections and associated problems are studied, including the control of credit operation analysis and evaluation of collateral, collateral verification, pricing and repossession. There will be a discussion of some of the legal implications and procedures in the area of repossession of collateral. An introduction to the basic elements of counseling and family financial management. Included are counseling concepts, evaluation in ethics, family resources, basic money management, consumer credit, family budget components, Social Security conditions and benefits, life insurance annuities, investments, estate planning and consumer education. Three lecture hours per week. Three semester hours

CRU 233 **Financial Law, Rules and Regulations as Applied to Credit Unions** (3,3,0). An in-depth study of the Equal Credit Opportunity Act, Regulation B and the Fair Housing Act which prohibits discrimination in lending as enforced by five federal agencies, including the National Credit Union Association for Federally Chartered Credit Union and the Texas Credit Union League for State Chartered Credit Unions. This study will also include the primary differences in the Charter, By-Laws and Regulations governing Federally Chartered and State Chartered Credit Unions. The Fair Credit Billing Act and Regulation Z will be discussed in detail, particularly as it is applicable to credit union operations. Discussions will be held of the Right of Rescinsion under the Truth In Lending Law. Title VII of the Civil Rights Act of 1964, as amended by the Equal Employment Opportunity Act of 1972, will be discussed as it is applicable to credit unions. Also included will be a discussion

of the Equal Pay Act of 1963 and the Executive Order 11246, as amended. Discussions will also be held concerning the requirements of the Occupational Safety and Health Administration Regulation as applied to the credit union work force. A discussion will be held concerning National Credit Union Association Rules and Regulations regarding dividend and interest requirements of both Federally and State Chartered Credit Unions. Three lecture hours per week. Three semester hours.

Data Processing

DAP 130 **Introduction to Data Processing** (3,3,0). This course will give the student a basic knowledge of unit record and computer equipment through a broad approach to the data processing techniques. Study encompasses the history of data processing from early manual methods of today's third generation equipment. Equipment is studied from a functional rather than an operational standpoint. Self-paced, individualized instruction.

DAP 131 **Key Punch Operation** (3,2,3). This course is designed to give the experienced typist skills necessary to become a key punch operator. Training will be given in all phases of key punching, including handling of data, handling of cards, and operation and care of equipment. Prerequisite: 50 wpm typing speed.

DAP 132 **Basic Programming** (3,3,0). This course is designed to acquaint the student with principles of BASIC programming. Statistical, business and mathematical problems will be solved using simple notation in a language used by many microcomputers.

DAP 134 **ANS COBOL Programming** (3,3,3). This course covers the basic elements of COBOL and provides the student with form, file and programming skills necessary to produce a wide variety of business reports using sequential input files.

DAP 135 **Form and File Design** (3,3,0). This course is designed to guide the student through a study of the design of automated business forms and files. Self-paced, individualized instruction.

DAP 230 **ADVANCED ANS COBOL Programming** (3,3,3). This course covers processing involving magnetic tape, magnetic disk, and includes such topics as input editing, sequential file updating and creation, updating and retrieval of indexed sequential files. Prerequisite: ANS COBOL

DAP 231 **PL/I Programming** (3,3,3). This course is designed to acquaint the student with principles of PL/I programming. Business type problems using card, tape and disk files will be solved using the PL/I language.

DAP 232 **Internship in Data Processing** (3,1,4). This course is designed to provide the student with actual experience in a chosen area of data processing. The student will be provided qualified supervision working with real situations. The area chosen will be operations, applications programming, systems programming or data entry. Prerequisites: (A) Operations: DAP 130, DAP 246, (B) Applications Programming: DAP 130, DAP 135, DAP 134, or DAP 236, DAP 231, DAP 243 (C) Systems Programming: DAP 130, DAP 236, DAP 243, DAP 246 (D) Data Entry: DAP 130, DAP 131, DAP 135.

DAP 233 **Assembler Language Programming** (3,3,1). This is designed to acquaint the student with the basic principles of Assembler Language programming. Internal aspects of the IBM System 360 are presented. Business type problems will be programmed by the student. Prerequisite: DAP 134

DAP 234 **RPG II Programming** (3,3,3). This course is designed to acquaint the student with principles of RPG II Programming. Business problems involving card, tape and disk files will be presented.

DAP 235 **Advanced Automated Accounting System** (3,3,0). This course will encompass accounting systems as applied to modern data processing methods. Study will be made into structure of accounts, methods of analyzing and improving accounting systems, and the design of automated accounting systems. Prerequisite: ACC 131 or ACC 231

DAP 236 **FORTRAN Programming** (3,3,1). This course is designed to acquaint the student with principles of Fortran programming. Scientific and mathematical problems will be solved using arrays, matrix and floating point numbers.

DAP 243 **Commercial Applications** (4,2,5). Individual assignment to carefully selected business problems. The student must successfully design and develop a genuine business application using data processing. The student will fully document and prepare including flow charts, file and form design, necessary programming and data collection providing acceptable output as proof of completion. Prerequisite: DAP 134, or DAP 231, or DAP 233, or DAP 234

DAP 246 **Computer Operations** (3,3,1). The student will learn to operate various input-output components of the computer system. An extensive study of Job Control Language is presented. Operation of the IBM System 360 under DOS using multiprogramming will be studied. DAP 233 should be taken prior to or concurrently with this course.

Drama

DRA 111
112
113
114

Drama Practicum (1,0,3). A study in dramatic activities for performances and competition. Laboratory practice in one-act plays, solo and duet acting, and practical application of principles of theater art. Majors and minors required to enroll each semester.

DRA 131 **Introduction to the Theater** (3,3,0). A general survey of the major fields of theater art. 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 design, stage lighting, costume and costume design. Participation in major productions. For drama majors and non-majors. Satisfies the Fine Arts Humanities requirement.

DRA 132 **Stagecraft** (3,3,0). A beginner's course in the art and crafts of the theater. Costuming, scene design and construction, lighting and makeup. Practical experience working with one-act plays and major productions. Three hours lab.

DRA 134 **Theater Speech** (3,3,0). A study of and practice in using the actor's voice. Includes breath control, articulation-enunciation-pronunciation, projection, and phonetics. Helpful to any student wishing to improve vocal performance and correct careless and ineffective speech habits. Required of drama majors.

DRA 135 **Acting I** (3,3,0). An elementary study of the principles of acting including following stage directions, the use of stage areas, coordination of voice and body, improvisation practice in scenes from plays. Practical application in working with college productions.

DRA 136 **Acting II** (3,3,0). A continuation of Acting I with emphasis on characterization and creating a role. Theories of Acting and Styles of Acting. Practical application in working with college productions. Prerequisite: Drama 133-Acting I or permission of the instructor.

Economics

ECO 131 **Survey of Economics** (3,3,0). An overview of the total U.S. economy and how individual firms operate within the contemporary economic system. (Business and Economic majors are required to take ECO 231 and 232.)

ECO 231 **Principles of Economics I** (3,3,0). Fundamental principles of economics, emphasizing the overall view of the American economy and macro-economics.

ECO 232 **Principles of Economics II** (3,3,0). A micro-economic study of market structures; demand, supply, costs, and theory of the firm and of income distributions. An analysis of American economic growth and problems, international economics, and comparative economic systems. Prerequisite: ECO 231

Education

EDU 135
136 **Public School Art** (3,3,0). The teaching of public school art in the elementary grades. Training in writing and drawing as requested by the State Department of Education; construction work; elementary free-hand and mechanical perspective; elementary design and color; lettering and poster work; art appreciation in elementary grades.

EDU 137 **Public School Music** (3,3,0). A narrative description is found in the music section of the current catalogue as Music 137.

EDU 138 **Music Teaching in the Elementary Grades** (3,3,0). A narrative description is found in the music section of the current catalogue as Music 138.

Emergency Medical Technology

EMT 141 **Emergency Medical Procedures I** (4,3,3). This is the first in a series of two courses required to become an Emergency Medical Technician. The course will develop student proficiency in the use and care of equipment in emergency medical care, recognition of symptoms and emergency treatment until the physician arrives and responsibilities in an emergency where medication is needed. (4 semester hours credit)

EMT 142 **Emergency Medical Procedures II** (4,3,3). This course is an extension of EMT 141 and will include use of ambulance units. The course will develop defensive driving, basic cardiac techniques, trauma care, and practice in simulated emergencies. Also includes hospital observations. (4 semester hours credit)

EMT 161 **Advanced Emergency Medical Procedures I** (6,4,8.5). This course is the first in a series of two courses for a registered EMT to take in pursuance of an advanced (paramedic) certificate. It includes study of the metric system, cardio-pulmonary systems, advanced life support, cardiac arrhythmia recognition and interpretation. This course is physician directed and includes approximately 136 clock hours in clinical practice. (6 semester hours credit)

EMT 162 **Advanced Emergency Medical Procedures II** (6,4,8.5). This course is an extension of EMT 161, and will include instruction in major wounds and trauma, IV infusion and therapy, emergency medical drugs and pharmacology, cardiac monitors and defibrillator with telemetry. This course is physician directed and includes 136 hours in clinical experience and practices, focused around the emergency room and surgical intensive care. (6 semester hours credit)

EMT 133 **Advanced Emergency Medical Procedures III** (3,1.5,3). This course is a continuation of the advanced paramedic curriculum for certification. It includes prehospital assessment, management and transportation of obstetrical and gynecological emergencies, the emotionally disturbed, and the special problems in caring for the pediatric patient, including the high-risk newborn. EMS radio communication procedures, patient information reporting, and bio-telemetry transmission are included. Twenty-four lecture hours, fifty clinical hours. Prerequisite: Must be an Emergency Medical Technician; completion of EMT 161 and 162. (3 semester hours credit)

EMT 241 **Advanced Cardiac Life Support** (4,1,3). This course is designed for professional personnel practicing in critical care units, emergency departments and paramedic units. Course content includes basic and advanced life support, arrhythmia recognition, emergency cardiac drugs, and use of mechanical CPR devices. This course is part of the requirement for recertification. (64 clock hours)

Engineering

EGR 111 **Introduction to Engineering Problems** (1,2,0). Introduction to the profession of engineering. Vectors and vector algebra, logical thinking, neatness and form in solution of problems stressed. Introduction to the use of the computer, hand-held calculators, and programmable calculators in problem solution. Class meets two hours per week.

EGR 112 **Introduction to Engineering Problems** (1,2,0). Introductory analysis, statics, and dynamics problems and their solutions. Prerequisite: EGR 111 or approval of instructor. Class meets two hours per week.

EGR 131 **Engineering Graphics I** (3,2,2). Technical drawing including freehand lettering, theory of orthographic projections, auxiliary projection, sections, revolution, intersections of surfaces, axonometrics, working drawings, tracings and duplications. (2 hours lecture, 2 hours laboratory with supervised study and individual ihstruction.)

EGR 132 **Engineering Graphics II** (3,2,2). Descriptive geometry including principal views, primary and oblique views, visualization of lines and planes, intersections, warped surfaces. (2 hours lecture, 2 hours laboratory, supervised study and individual instruction.) Prerequisite: EGR 131

EGR 133 **Architectural Drawing** (3,2,2). Standard architectural details, conventional representation and practice, detail and assembly drawing. The course includes the planning and execution of simple and practical architectural projects. Topographical drawings, tracings, and freehand lettering constitute a part of the course. (2 hours lecture, 2 hours laboratory) Prerequisite: EGR 131

EGR 134 **Architectural Drawing** (3,2,2). A continuation of EGR 133. Architectural details in various types of construction, working drawings, and techniques of presentation. (2 hours lecture, 2 hours laboratory) Prerequisite: EGR 133

EGR 135 **Machine Drawing** (3,2,2). Application of the graphic language to engineering purposes, engineering sketches, machine fastenings, conventional practice, machine details, and working drawings. (2 hours lecture, 2 hours laboratory). Prerequisite: EGR 132 or concurrent enrollment.

EGR 136 **Machine Drawing** (3,2,2). A continuation of Machine Drawing 135. Application of the graphic language to engineering purposes in areas of machine design and details. Students must meet requirements of extreme accuracy and detail in his drawing of complicated machine processes, and usage of technical charts is emphasized. Drawings will be in third angle projection as well as in axonometric projections. (2 hours lecture, 2 hours laboratory.) Prerequisite: EGR 135

EGR 137 **Sheet Metal Layout** (3,2,2). A review of geometric construction, followed by the major divisions of sheet metal layout: parallel line, radial, triangulation and gore. (2 hours lecture, 2 hours laboratory). Prerequisite EGR 132 or concurrent enrollment.

EGR 231 **Engineering Mechanics I (Statics)** (3,3,0). Fundamental principles of statics: force systems, equilibrium, structures, distributed forces, friction, virtual work, moments of inertia of area, and moments of inertia of mass. Prerequisite: MTH 231, and Co-Requisite: MTH 232, PHY 243.

EGR 232 **Engineering Mechanics II (Dynamics)** (3,3,0). Principles of dynamics; Kinematics, Principles of Kinetics, Newton's laws of motion, work and energy, impulse and momentum, and periodic motion. Prerequisite: EGR 231 or Division Approval

English

Placement of all beginning freshman English students will be determined by ACT or SAT scores or English Placement Test scores.

ENG 031 **Basic English** (3,3,0). A course, using varied instructional techniques, designed to help students overcome deficiencies in their writing and to improve writing skills necessary for them to pursue college-level work. In addition, laboratory work may be assigned at the discretion of the instructor. A grade of C is the minimum necessary to pass this course. (Non-transferable)

ENG 131 **Composition and Rhetoric I** (3,3,0). An intensive study of writing and reading skills, including research techniques. Prerequisite: a satisfactory score on English placement test or a C or better in English 031.

ENG 132 **Composition and Rhetoric II** (3,3,0). A continuation of English 131 with the addition of literary study of short stories, poems, drama, and the novel. A research paper is required. Prerequisite: English 131.

ENG 231 **British Literature I** (3,3,0). A general survey course of the literature of Britain from the beginning through the eighteenth century. A chronological study of the principal authors, their works, and the movements pertaining to British literature. Prerequisite: English 132.

ENG 232 **British Literature II** (3,3,0). A general survey course composed of a chronological study of the principal authors of Britain during the nineteenth and twentieth centures, their works, and the trends in British literature. The study of a British novel. Prerequisite: English 132.

ENG 233 **American Literature I** (3,3,0). A critical study of the major American writers from Edward Taylor through Melville. Emphasis is placed upon the aesthetic values of literature as art and upon literary analysis. Prerequisite: English 132.

ENG 234 **American Literature II** (3,3,0). A continuation of English 233 from Whitman through Faulkner including a study of the novel and of contemporary poetry. Prerequisite: English 132.

ENG 235 **World Literature I** (3,3,0). A study of the classics of western literature from Homer through the early Renaissance and the interrelations of literary form and thought. Prerequisite: English 132.

ENG 236 **World Literature II** (3,3,0). A study of the classics of the western world from Shakespeare to the present and the interrelations of literary form and thought. Prerequisite: English 132.

ENG 237 **Selected Studies in Literature** (3,3,0). Intensive reading in single areas unified by period, genre, or theme. Present topics — Short Fiction or Literature of the American West. May be repeated for credit when topics vary. Prerequisite: English 132, and sophomore standing.

ENG 239 **Report Writing and Correspondence** (3,3,0). The writing of technical reports, and executive business letters.

Farm and Ranch Management

FRM 131 **Farm Shop** (3,2,3). Basic principles of forging, oxyacetylene and arc welding, soldering, sheet metal, tool sharpening, concrete construction, farm carpentry, and selection and care of tools; basic principles of electricity and their application to the farm setting. (Lecture 2 hours, Laboratory 3 hours)

FRM 132 **Livestock Selection and Evaluation** (3,2,3). Comparative evaluation of breeding and market animals. Live animal evaluation of beef and dairy cattle, swine, and horses. Use of pedigree records and production tests data in selection. (Lecture 2 hours, Laboratory 3 hours)

FRM 142 **Principles of Farm and Ranch Management** (4,3,2). A study of problems associated with the organization and operation of farm businesses. Application of economic and business principles toward problem solving for more profitable and efficient operation. Actual farm and ranch data will be utilized in laboratory work. (Lecture 3 hours, Laboratory 2 hours)

FRM 143 **Farm Power and Machinery** (4,3,3). Operation, adjusting, and servicing of farm engines and tractors. Adaptability, selection, economic utilization, construction, operation and adjustment of the principal tillage, planting, cultivating, harvesting, and feed processing machines. (Lecture 3 hours, Laboratory 3 hours)

FRM 144 **Agricultural Chemicals** (4,3,2). A survey of the importance and use of agricultural chemicals. Pesticides, insecticides, herbicides and other important products for farm and non-farm use will be covered. Approved rates of application, tolerance, permissible residue limits, proper equipment and calibrations. The proper use of these chemicals and their effect on environment will be included. (Lecture 3 hours, Laboratory 2 hours)

FRM 231 **Commercial Vegetable Production** (3,3,2). A study of principles and practices applicable to the production and marketing of commercial vegetable crops. Variety adaptation, nutrient requirements, propagation techniques, weed, insect and disease control; harvesting, storage and marketing. (Lecture 3 hours, Laboratory 2 hours)

FRM 232 **Farm Forestry** (3,2,3). Principles and practices of forestry with special reference to the farm unit. Emphasis will be placed on growth, protection, yield and management of farm timber stands. (Lecture 2 hours, Laboratory 3 hours)

FRM 233 **Farm Business Records** (3,2,3). A study of different records and record systems utilized in effective farm and ranch management; includes income and expenses, income tax records, inheritance and estate records, inventories, production records and budgets; term problem assignments requiring the keeping of set of records for a year's operation. (Lecture 2 hours, Laboratory 3 hours)

FRM 235 **Cooperative Work Experience** (3,1,20). Students will work on a farm or ranch or agricultural related business in the local area on a co-op arrangement between the college and the business. Farms and ranches will be selected to correspond with the student's major interests. The student on-the-job training will be supervised by the instructors as well as their immediate supervisor at each farm business. Written reports and oral consultations on problems encountered will be made. (Lecture 1 hour, Laboratory 20 hours)

FRM 236 **Marketing Agricultural Products** (3,3,1). A course designed to give basic knowledge of marketing principles applicable to agricultural products; market grades, trends, and channels for livestock and crop commodities, emphasis on futures trading. (Lecture 3 hours, Laboratory 1 hour)

FRM 241 **Pasture Management** (4,3,2). Adaptation, production and management of permanent and temporary pastures for this area. Including establishment, fertilization, weed control, grazing systems and overseeding. Identification of adapted plant and weed species will be covered. (Lecture 3 hours, Laboratory 2 hours)

FRM 242 **Animal Health** (4,3,2). The broad field of animal health will be treated under such topics as internal and external parasites, principal diseases of livestock, their importance, identification and control, handling diseased animals, working with the veterinarian, and preventive livestock medicine. Students will study basic anatomy and physiology of farm animals. (Lecture 3 hours, Laboratory 2 hours)

FRM 243 **Principles of Animal Feeding** (4,3,2). Digestion and use of feeds for maintenance and production; nutritive requirements of livestock, nutritive values of different feedstuffs, selection based on composition and costs, ration formulation, processing and handling; supplemental feeding and possible limiting factors in feed efficiency. (Lecture 3 hours, Laboratory 2 hours)

FRM 244 **Advanced Crop Production** (4,3,2). Production, harvesting and marketing of cotton, soybeans and feed grains. Diseases, insects and weed pests. (Lecture 3 hours, Laboratory 2 hours)

FRM 245 **Beef Production** (4,3,2). The beef cattle industry, principles involved in breeding, feeding, management, disease and parasite control, and marketing analysis of ranch and feed lot systems. (Lecture 3 hours, Laboratory 2 hours)

FRM 246 **Horse Management and Training** (4,3,2). Breeding, feeding, management, and training of stock and pleasure horses; growing and developing foals, anatomy; unsoundnesses; parasites and diseases; stables and equipment; shoeing; fitting for show and sale. (Lecture 3 hours, Laboratory 2 hours)

FRM 247 **Soil and Fertilizer Technology** (4,3,2). A study of soil characteristics, properties, development and soil-plant relationships; soils and water conservation, uses and application of commercial fertilizers and soil amendments to maintain soil fertility and proper pH. (Lecture 3 hours, Laboratory 2 hours)

FRM 249 **Meat Processing and Evaluation** (4,3,2). Slaughtering, processing, and preservation methods of the meat packing industry. Wholesale and retail cuts of meat, sanitation practices, grading of meat and meat products will be included. (Lecture 3 hours, Laboratory 2 hours)

Fire Protection Technology

FPT 131 **Fundamentals of Fire Protection** (3,3,0). History of philosophy of fire protection, review of statistics of loss of life and property by fire, introduction to agencies involved in fire protection, current legislative developments and career orientation, recruitment and training for fire department, position classification and pay plans, employee organizations, a discussion of current related problems and review of expanding future fire protection problems. (3 Semester Hours Credit)

FPT 132 **Fire Protection Systems** (3,3,0). Study of the required standard for water supply, special hazards protection systems, automatic sprinklers and special extinguishing systems, automatic signaling and detection systems, rating organizations and underwriting agencies. (3 Semester Hours Credit)

FPT 133 **Fire Prevention** (3,3,0). The objectives and views of inspections, fundamental principles, methods, techniques, and procedures of fire prevention administration. Fire Prevention organizations: public cooperation and image; recognition of fire hazards; insurance problems and legal aspects; development and implementation of a systematic and deliberate inspection program. Survey of local, state, and national codes pertaining to fire prevention and related technology; relationship between building inspection agencies and fire prevention organizations. Engineering as a solution to fire hazards. (3 Semester Hours Credit)

FPT 134 **Industrial Fire Protection I** (3,3,0). Specific concerns and safeguards related to business and industrial organizations. Study of industrial fire brigade organization and development, plant lay-out, fire prevention programs, extinguishing factors and techniques, hazardous situations and prevention methods. Gaining cooperation between the public and private fire department organizations. Study of elementary industrial fire hazards in manufacturing plants. (3 Hours Credit)

FPT 135 **Industrial Fire Protection II** (3,3,0). Development of fire and safety organizations in industry; relation between private and public fire protection organizations; current trends, deficiencies and possible solution for industrial fire problems; role of insurance and other special organizations; an indepth study of specific industrial processes, equipment, facilities and work practices to understand the potential hazards and techniques to detect and control such hazards. Field trips to selected plants and demonstrations of new techniques, equipment, and innovations. (3 Semester Hours Credit)

FPT 136 **Building Codes and Construction** (3,3,0). A survey of physical, chemical, and electrical hazards and their relationship to loss of property and/or life. Study of codes, laws, problems, and cases. Detailed examination and study of the physical and psychological variables related to the occurrence of casualties. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks. (3 Semester Hours Credit)

FPT 139 **Fire Safety Education** (3,3,0). A survey of physical, chemical, and electrical hazards and their relationship to loss of property and/or life. Study of codes, laws, problems, and cases. Detailed examination and study of the physical and psychological variables related to the occurrence of casualties. Safe storage, transportation and handling techniques are stressed to eliminate or control potential risks. (3 Semester Hours Credit)

FPT 231 **Math for Fire Protection Technology** (3,3,0). A course designed to provide a practical knowledge of commercial, technical, and simple scientific use of arithmetic, algebra, geometry, and trigonometry as related to fire technology. (3 Semester Hours Credit)

FPT 232 **Fire and Arson Investigation** (3,3,0). A study of the detection of arson, investigation techniques, case histories, gathering and preserving of evidence; preparing for a court case; selected discussion of laws, decisions and opinion; kinds of arsonists, interrogation procedures, cooperation and coordination between fire fighters and arson investigators and other related topics. (3 Semester Hours Credit)

FPT 233 **Fire Administration I** (3,3,0). An indepth study of the organization and management as related to a fire department including budgeting, maintenance of records and reports, and management of fire department officers. Personnel administration and distribution of equipment and personnel and other related topics, including relation of various government agencies to fire protection areas. Fire Service Leadership as viewed from the Company Officer's Position. (3 Semester Hours Credit)

FPT 234 **Fire Administration II** (3,3,0). Study to include insurance rates and ratings; preparation of budgets, administration and organization of training in the fire department; city water requirements, fire alarm and communications systems; importance of public relations, report writing and record keeping; measurements of results, use of records to improve procedures, and other related topics; legal aspects relating to fire prevention. (3 Semester Hours Credit)

FPT 235 **Hazardous Materials I** (3,3,0). Study of chemical characteristics and behavior of various materials that burn or react violently related to storage, transportation, handling hazardous materials, i.e. flammable liquids, combustible solids and gases. Emphasis on emergency situations and most favorable methods of handling fire fighting and control. (3 Semester Hours Credit)

FPT 236 **Hazardous Materials II** (3,3,0). Hazardous materials covering storage, handling, laws, standards, and fire fighting techniques associated with chemicals, gases, flammable liquids, corrosives, poisons, explosives, rocket propellants and exotic fuel, and radioactive materials. The formation of toxic fumes and health hazards is also stressed. Ignition and combustion characteristics of gases, liquids, and solids related to free-burning fire and explosion phenomena. Familiarization with radiological instruments, human exposure to radiation, decontamination procedures, common uses of radioactive materials, and operational procedures. (3 Semester Hours Credit)

FPT 237 **Legal Aspects of Fire Protection** (3,3,0). A study of legal rights and duties, liability concerns and responsibilities of the fire department while carrying out their duties. Introduction and basic concepts of Civil and Criminal law, the Texas and Federal judicial structure, and cities' liability for acts of the fire department and fire prevention bureaus. An in-depth study of various cases concerning fire fighters, fire departments and municipalities. (3 Semester Hours Credit)

FPT 239 **Technical Writing for Firemen** (3,3,0). Advanced writing in technical scientific, and business fields, reports, proposals, and other papers; correspondence. Emphasis on collecting, organizing, and presenting materials applicable to fire protection technology. (3 Semester Hours Credit)

FPT 230 **Fire Fighting Tactics and Strategy** (3,3,0). Essential elements in analyzing the nature of fire and determining the requirements. Efficient and effective utilization of manpower, equipment and apparatus. Emphasis to be place on pre-planning, study of conflagration problems, fire ground decision making and attack tactics and strategy. Use of mutual aid and large scale command problems.

French

FRE 141 **Elementary French** (4,3,2). A course in the fundamentals of pronunciation, grammar, conversation, and sight reading. (3 hours lecture, 2 hours laboratory practice a week)

FRE 142 **Intermediate French** (4,3,2). Prerequisite: French 141, two units of high school French, or an appropriate score on placement test. Continuation of French 141 and reading of simple texts. (3 hours lectures, 2 practice hours per week)

FRE 231 **Composition and Reading** (3,3,0). Emphasis on fluent reading and accuracy in oral and written expression. Prerequisite: French 142

FRE 232 **Composition and Reading** (3,3,0). Increased work in French literature and written expression. Prerequisite: French 231.

FRE 213 **Special Studies in French** (1,1,0). A course based on needs and interests of individual students. Prerequisite: French 142 and permission of the instructor.

FRE 233 **Special Studies in French** (3,3,0). A course based on needs and interests of individual students. Prerequisite: French 142 and the permission of the instructor.

General Related Courses

One or more of the following courses will be taken each 12-week period in the following programs: Auto Body Repair, Auto Mechanics, Commercial Electronics, Air Conditioning/Refrigeration, Small Engine Repair, and Welding. This requirement will be altered only by the Vocational Dean.

GRC 131 **Shop Related Mathematics** (3,5,0). A placement test will be used to determine the level of the student who will be slotted in his given level in fundamental math, which will be related to the given field of his choice. All texts and problems used in this course will be fitted to the individual needs of each student and identified with the trade course being taken. (5 hours per week, 60 hours per term)

GRC 231 **Shop Related Mathematics** (3,5,0). Continuation of GRC 131 to levels of algebra and trigonometry as needed in shops. (5 hours per week, 60 hours per term)

GRC 132 **Related Communications** (3,5,0). Developmental reading, speaking, and writing. (5 hours per week, 60 hours per term)

GRC 133 **Small Business Management** (3,5,0). A course in the related education section that services areas involved in running a business. Shop layout, purchase of land and equipment, payroll, personnel functions, administrative functions, etc.

GRC 134 **Applied Drafting** (3,5,0). Use of drafting instruments, symbols, codes, basic lettering and dimensional drawings. (5 hours per week, 60 hours per term)

Geography

GPY 131 **Principles of Geography** (3,3,0). The study of human society in relation to the physical conditions and the natural resources of the earth. This course should make clear such factors of natural environment as location, climate, relief and forests with emphasis on human response to these factors.

GPY 132 **Economic Geography** (3,3,0). How and where man makes his living in the various regions of the world; problems on production utilization, and distribution of goods; special emphasis on intelligent uses of human and natural resources.

Geology

GEO 141 **General Physical Geology** (4,3,3). A study of earth materials and land forms and the processes of geology at work upon and within the earth. (3 hours lecture, 3 hours laboratory)

GEO 142 **General Historical Geology** (4,3,3). A study of the history of the earth and life upon it as determined from its rocks and fossils. (3 hours lecture, 3 hours laboratory)

Heavy Equipment Mechanics (Clock Hour Program)

HEM 161 **Internal Combustion Engine I.** A study of shop safety and tool and engine nomenclature. Historical background of the internal combustion engine. Engine disassembly and reassembly.

HEM 162 **Internal Combustion Engine II.** A continuation of HEM 161. Advanced instruction in assembling and disassembling of engines. In this quarter, the student will be introduced to welding techniques for repair.

HEM 163 **Power Applications.** An in depth study of clutches, torque converters, fluid drives, differentials, power transmitters, transmissions. This course begins a study of the hydraulic systems as they apply to power train applications.

HEM 164 **Industrial Co-op Training I.** At this point in a student's training he will begin having coordinated work experiences in industrial shops. Of the 360 hours in the quarter, 120 hours will be on campus in the lab and will involve electrical systems, starters, generators, alternators, voltage regulators and like items.

HEM 165 **Industrial Co-op Training II.** In this quarter a student will continue coordinated work experiences at industrial training sites. One hundred and twenty hours at this 360 hours quarter will be spent on campus in a study of hydraulics, theory and application to repairs on accessories related to heavy equipment operations.

HEM 166 **Industrial Co-op Training III.** This final quarter of 360 hours is a continuation of HEM 165. Students will be involved in coordinated work stations and will come back to campus 120 hours for specialization in trouble shooting, fuel systems, power train repair and engine analysis.

Heavy Equipment Mechanics (Semester Hour Program)

HEM 131 **Basic Blue Print and Schematic Reading** (3,3,0). This will be a basic course in print and schematic reading for the internal combustion engine and various pieces of heavy equipment and their applications. (3 hours lecture, 3 hours credit)

HEM 132 **Fuel Systems** (3,1,3). This course will offer the basic theory for control of fuels, transfer of fuels, fuel pumps, injectors, injector theories and theories of carburetors and theories of various fuel application. (1 hour lecture, 3 hours lab per week) 3 hours credit.

HEM 133 **Hydraulic Systems** (3,1,3). This is an introductory course to the principles of hydraulics and their practical application to heavy equipment mechanics. The course requires 1 hour of lecture and 3 hours laboratory per week and has a course credit of 3 hours.

HEM 141 **Electrical Systems** (4,3,3). This is a basic course in the theory of electrical systems of diesel engines and their related pieces of heavy equipment. This will include items such as starters, generators, alternators, voltage regulators and items as it would be applied to pieces of heavy equipment such as bulldozers or five-ton vehicles under diesel applications, etc. (3 hours lecture, 3 hours lab per week) 4 hours credit.

HEM 142 **Introduction to Welding** (4,2,4). Welding techniques applicable to engine repair and heavy equipment accessories are to be stressed. This includes gas and arc welding principles and will prepare a student for use of various rods on different gauge materials and welding settings. (2 hours lecture, 4 hours lab per week) 4 hours credit.

HEM 143 **Electronic Troubleshooting** (4,3,2). This course was designed to teach techniques and procedures for use with electronic and other types of test instruments to analyze engine problems. Involves dynometer tests, ignition tests and other systems designed to locate problems with the diesel and heavy gas engine applications. The course requires 3 hours of lecture and 2 hours of laboratory per week and has a course credit of 4 hours.

HEM 161 **Internal Combustion Engines** (6,3,6). This is a course designed to give the student basic information as to the historical background and development of internal combustion engines. Basic design and working parts of the engine will be demonstrated in a classroom setting. As the students are carried through the program they will be carried into a more advanced instruction program in actual disassembling and reassembling of engines. Mockup demonstrations will be used in this class of the various types of engines found in heavy diesel and gas applications. The intent of this class is to teach the student the basic techniques in engine part identification for rapid disassembling. (3 hours lecture, 6 hours lab per week) 6 hours credit.

HEM 162 **Internal Combustion Engines** (6,3,6). This is a continuation of HEM 161 and includes repair as well as assembly procedures on diesel and gas engines. (3 hours lecture, 6 hours lab per week) 6 hours credit.

HEM 163 **Power Applications I** (6,3,6). This course is a study of theory and repair of standard transmissions, third members, clutch mechanisms, steering mechanisms (power and mechanical), propeller shafts, universal joints, wenches, and brakes. (3 hours lecture and 6 hours laboratory per week) 6 hours credit.

HEM 164 **Power Applications II** (6,3,6). This course is a study of automatic transmissions, final drives, differentials, control differentials, and cross drive transmissions. (3 hours lecture and 6 hours laboratory per week) 6 hours credit. Prerequisite: HEM 163.

HEM 165 **Power Applications III** (6,3,6). This course is a continuation of HEM 164. (3 hours lecture and 6 hours laboratory per week) 6 hours credit. Prerequisite: HEM 164.

History

HST 131
132 **Survey of Western Civilization** (3,3,0). Historical survey of the origin and development of institutional cultural life from earliest times to the present. Movement of universal significance and the continuity of human history are emphasized. The course is designed primarily to stimulate the student's ability to understand modern problems.

HST 133
134 **U. S. History** (3,3,0). A history of Texas from the political, economic, and social trends. First semester: History of the United States to 1877. Second semester: From 1877 to present.

HST 233
234 **History of the Afro-American** (3,3,0). A brief survey of the political, economic, and social development of the Afro-American in the United States and his contribution to American civilization. First semester: History of the Afro-American to 1877. Second semester: 1877 to present.

HST 231 **History of Texas** (3,3,0). A history of Texas from the Spanish Period to the present day. Stress will be placed upon the period of Anglo-American settlement, the Revolution, the Republic, and the development of the modern state. (This course is recommended for all education and history majors.)

Home Economics

HEC 234 **Nutrition** (3,3,0). A study of basic principles of nutrition in health and disease. The modern concept of an adequate diet based upon nutritional needs of the individual is stressed. Open to nursing students as an elective, but is not required for the associate degree. Prerequisite: None.

Industrial Electricity

IEL 161 **Introduction to Electronic Theory.** This course will introduce basic electronic and electrical wiring theory. Use of test equipment, shop procedure and safety will also be stressed. The Southern Building Code requirements that apply to the Texarkana area will be taught.

IEL 162 **Basic Wiring and Code Requirements.** Methods of installation in relationship to building codes will be included in this course. Students will wire 110 and 220 to learn control of voltages and size of wire installation for various electrical loads.

IEL 163 **A.C. and D.C. Motors and Theory.** Basic theory of conversions of A.C. and D.C. currents to drive motors. Also remote and slave servo applications will be surveyed. The use of test equipment for testing and repair of motor, transformers, etc. will be taught.

IEL 164 **Control Relays and Electro-Hydraulic Controls.** Basic concepts of slave servo relays for power control to electrically driven motors. Controlled motor start up through stage starting will be stressed. Electric systems to hydraulic controls and trouble shooting will be covered.

IEL 165 **Practical Application of Wiring.** O.S.H.A. techniques and wiring procedures will be emphasized in this quarter. Students will also begin a practical job site experience not to exceed 240 clock hours. Transformer theories not covered in previous quarters, including load factors and resistance will be taught.

Industrial Management

MGT 131 **Principles of Management** (3,3,0). Introduction into the basic elements of management. Explores areas of policy, organization structure, control procedures, leadership, and business objectives. Prerequisite: Concurrent enrollment in MGT 141 or consent of instructor.

MGT 132 **Personnel Management** (3,3,0). Management-employee relationships orientated toward the personnel responsibilities of all managers. The course is designed to provide techniques involving labor relations, understanding people, communicating, and building an effective working team. Prerequisite: Concurrent enrollment in MGT 142 or consent of instructor.

MGT 143 144 **Industrial Job Training** (4,0,20). Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in production or industrial management. Prerequisite: Concurrent enrollment in approved Management program or consent of instructor.

MGT 233 234 **Industrial Management Seminar** (3,3,0). A seminar in the basic elements in management including the nature of management, planning, directing, controlling, organizing, and other management development. Prerequisite: MGT 131-132: concurrent enrollment in MGT 243-244, or consent of instructor.

MGT 235 **Principles of Marketing** (3,3,0). A study of the role marketing plays in our economy. Special areas in pricing, market places, consumer motivation, and distribution of goods.

MGT 237 **Foremanship** (3,3,0). A class directly related to practices that lead to most effective production by employees. Involves working in a team, training, handling grievances, and other human factors.

MGT 238 **Human Relations** (3,3,0). A study of the procedures to develop good human relations in working with people. Course develops leadership qualities and techniques. Helps those in class to better understand themselves and the people they work with.

MGT 239 **Production Management** (3,3,0). A study of all aspects of production to include plant location and layout analysis, materials handling systems, preproduction planning, the production process, maintenance analysis, production and inventory control. This course is designed as an overview of the entire production entity.

MGT 243 244 **Industrial Job Training** (4,0,20). Continuation of supervised employment in the student's chosen field. Intended to provide increased supervisory responsibility for students preparing for careers in industrial management. Prerequisite: MGT 143-144; concurrent enrollment in MGT 233-234, or consent of the instructor.

Journalism

Journalism courses at Texarkana College seek to give a practical foundation in basic communication skills necessary for admittance to a senior college major or minor program in journalism. As elective courses for non-majors, journalism serves as an outlet for creative talent and school service through the production of its three major publications: the weekly newspaper, TCC Campus News; the magazine, Kaleidoscope; and the yearbook.

JRN 111 112 211 212 **Journalism Practicum** (1,0,5). Supervised practice and instruction in journalism, newswriting, editing, sales, newspaper layout, newspaper management, feature writing and publication. Some students will work at the Texarkana Gazette and others for the TCC Campus publication.

JRN 131 **Introduction to Mass Communications** (3,3,0). This introductory course is a survey of the media of mass communications as well as an examination of the evolution of todays concepts in mass communication. Laboratory is required.

JRN 231 **News Writing and Reporting I** (3,3,0). A study of the gathering and reporting of news is the emphasis of this course. The whole range of the reporter's work is covered by lecture and actual practice with the students working as reporters for the campus newspaper. Laboratory is required.

JRN 232 **Reporting II** (3,3,0). Continuation of Journalism 231 with a comprehensive study of copy editing for errors of fact and interpretation of English and newspaper style. Emphasis is placed on more complex stories and more specialized types of stories. Headline writing, proof reading and page make-up are introduced. Laboratory is required.

Other recommended courses for Journalism majors are:

***PTG 131 Cold Type Composition**
***PTG 132 Layout and Design**
***PTG 136 Advanced Layout and Design**
***PTG 138 Offset Camera and Strippers**

*Student should consult with advisor and study program from degree granting institution.

Law Enforcement Administration

Police Technology courses are not designed for transfer to a senior college or university and will not necessarily count toward any baccalaureate degree unless the senior college or university may choose to allow it.

LEA 131* **Introduction to Law Enforcement** (3,3,0). History, development and philosophy of law enforcement in a democratic society; introduction to agencies involved in the administration of criminal justice; career orientation.

LEA 132* **Criminal Investigation** (3,3,0). Introduction to the fundamentals of criminal investigation, including theory and history, conduct at crime scenes, collection and preservation of evidence.

LEA 133* **Legal Aspects of Law Enforcement** (3,3,0). History and philosophy of modern criminal law, including the structure, definition and application of statutes and leading case law; the elements of crimes and penalties; general provisions of the Penal Code.

LEA 134* **Criminal Procedure and Evidence** (3,3,0). Introduction to the rules governing the admissibility of evidence and types of evidence; criminal procedure in various courts, review of the Texas Code of Criminal Procedure, including laws of arrest, search and seizure, and leading case law on each topic.

LEA 135 **Traffic Planning and Administration** (3,3,0). History, development, economics of the modern transportation system; agencies involved in traffic administration and control; police traffic engineering, education, and enforcement.

LEA 136 **Patrol Administration** (3,3,0). Line activities of law enforcement agencies with emphasis on the patrol function and the prevention of crime; includes patrol force supervision, manpower distribution, types of patrol.

LEA 137 **Traffic Law** (3,3,0). A survey of local and state traffic laws, and techniques of enforcement. History, development, and economics of the modern transportation system; agencies involved in traffic administration and control; police traffic engineering, education, and enforcement.

LEA 231 **Juvenile Procedures** (3,3,0). The nature and extent of delinquency theories, prevention and evaluation, control, and treatment programs and procedures.

LEA 232* **Police Community Relations** (3,3,0). The role of the individual officers in achieving and maintaining positive public response, intergroup relations and public information.

LEA 233 **Probation and Parole** (3,3,0). The development, organization, operation and result of systems of probation and parole as substitutions for incarceration, methods of selection, and prediction scales.

LEA 234* **Police Role in Crime and Delinquency** (3,3,0). Study of deviant behavior and current criminological theories, with emphasis on police applications; crime prevention and the phenomenon of crime as it relates to juveniles.

LEA 235* **Police Organization and Administration** (3,3,0). Principles of organization and management as applied to law enforcement agencies; introduction to concepts of organizational behavior.

LEA 236 **Penology** (3,3,0). (Jail Operation and Management). The philosophy and objective of jail operation. Also the study of the Administrator's role in setting objectives, planning, decision making, and controlling of the jail.

LEA 241 **Defensive Measures** (4,3,3) Introduction to skills and techniques required for the safety and protection of criminal justice personnel. This course includes use of weapons, theory, and application. This is a sophomore level course and will have a lab fee. Four semester hours credit. Three hours lecture, three hours lab per week.

Humanities Elective. With the advise of the director of the Law Enforcement program or a Counselor, each candidate for an Associate Degree in Law Enforcement will take one semester Humanities elective.

Science Elective. With the advise of the director of the Law Enforcement program or a Counselor, each candidate for an Associate Degree in Law Enforcement will take two semesters of natural science.

Approved Electives. With the advise of the director of the Law Enforcement program or a Counselor, each candidate for an Associate Degree in Law Enforcement will take nine semester hours of approved electives. These courses must be approved Law Enforcement Electives.

*Students wishing to transfer to a senior institution should enroll in the courses indicated by an asterisk in addition to meeting the following course requirements: English 9-12 hours, History 6 hours, Science and/or Foreign Language 8-12 hours, Political Science 6 hours, Humanities and Other Electives 8-15 hours.

Mathematics

MTH 031 **Basic Mathematics** (3,3,0). Arithmetic operations on the whole numbers and integers, arithmetic operations on fractions, decimals, percentages, ratios, and proportions. Designed to strengthen arithmetic skills. No prerequisite.

MTH 130 **Intermediate Algebra** (3,3,0). Sets, logic, fundamental processes, linear and quadratic equations, graphs, exponents, radicals, and complex numbers. Designed for those students who have had only one year of high school algebra. (Non-transferable)

MTH 131 **College Algebra** (3,3,0). Quadratics, permutations, combinations, inequalities, partial fractions, determinants. functions, and graphs, polynomials, and systems of equations. Prerequisite: Algebra I and Algebra II in high school, or MTH 130

MTH 132 **Plane Trigonometry** (3,3,0). Sets, ordered relations, number intervals, trigonometric functions, radian measure, variations and graphs of the functions, solution of right triangle and applications, trigonometric identities, equations, and inverse functions, general triangle and complex numbers. Prerequisite: Two years of high school algebra or MTH 131

MTH 133 **The Fundamental Concepts of Mathematics I** (3,3,0). Presents material covered in a traditional algebra course but with emphasis toward business applications. Linear equations, systems of linear equations, systems of linear inequalities, elements of matrix algebra, determinants, linear programming, and logarithms. Prerequisite: Two years of high school algebra or college algebra is desirable.

MTH 134 **Elementary Statistics** (3,3,0). Collection and tabulation of data, bar charts, graphs, mean, standard deviation variance, dispersion correlation, index numbers, normal curve and other distributions, and applications of probability to various fields. Prerequisite: Algebra I in high school

MTH 135 **Modern Mathematics I** (3,3,0). Recommended for elementary education majors. Modern symbols, elementary set theory, logic, introduction to the structure of the real number system and its subsystems, elementary number theory, systems of numeration, and number sentences. No Prerequisites.

MTH 136 **Analytic Geometry** (3,3,0). Co-ordinates and loci, the straight line, transformation of co-ordinates, the circle, tangents, equations of loci, parametric equations, polar co-ordinates, properties of the conic sections, transcendental curves. Prerequisite: Mathematics 131 and 132 or Division Approval

MTH 137 **Modern Mathematics II** (3,3,0). A continuation of Mathematics 135 with the application of fractions and rational numbers, decimals and real numbers, mathematical systems, concepts of inequalities, functions, systems of equations, complex numbers, and elementary geometry. Prerequisite: MTH 135

MTH 139 **Liberal Arts Mathematics** (3,3,0). Designed to satisfy the mathematics requirements for liberal arts major. Some topics included are: history of mathematics, number theory, algebraic and geometric concepts, statistics, probability, logic, computer science. Not intended for students majoring in mathematics or natural sciences. No prerequisite.

MTH 230 **The Fundamental Concepts of Mathematics II** (3,3,0). Inequalities, linear programming, polynomials, limits, differential calculus, integral calculus, application to Management Sciences. Prerequisite: MTH 133 Or MTH 131

MTH 231 **Calculus** (3,3,0). Variables, functions, limits, derivatives, and differentials. Differentiation and integration of algebraic, sine and cosine functions, Mean Value Theorem. Applications. Prerequisite: Math 136 or in parallel or Division Approval.

MTH 232 **Calculus** (3,3,0). Differentiation and integration of transcendental functions, improper integrals, approximate integration, centroids, and hyperbolic functions. Prerequisite: Math 231.

MTH 233 **Calculus** (3,3,0). Vectors and equations, centroids, moments of inertia work, partial derivatives, series, multiple integrals, indeterminant forms, ordinary differential equations, applications. Prerequisite: Math 232

MTH 234 **Linear Algebra** (3,3,0). Finite dimensional vector spaces, linear transformations, matrices, quadratic forms, eigen values, eigen vectors, vector spaces over complex numbers. Prerequisite: MTH 131 and MTH 132

Mid-Management

MGT 131 **Principles of Management** (3,3,0). Introduction to the basic elements of management. Explores areas of policy, organization structure, control procedures, leadership, and business objectives. Prerequisite: Concurrent enrollment in MGT 141 or consent of instructor.

MGT 132 **Personnel Management** (3,3,0). Management-employee relationships orientated toward the personnel responsibilities of all managers. The course is designed to provide techniques involving labor relations, understanding people, communicating, and building an effective working team. Prerequisite: Concurrent enrollment in MGT 142 or consent of instructor.

MGT 133 **Salesmanship** (3,3,0). Goes into basic steps in selling and then advances into areas including analyzing customer behavior, product knowledge, and special skills in selling.

MGT 141 142 **Management Training** (4,0,20). Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in business management. Prerequisite: Concurrent enrollment in approved Management program or consent of instructor.

MGT 143 144 **Industrial Job Training** (4,0,20). Supervised employment in the student's chosen field. Intended to provide practical experience for students preparing for careers in production or industrial management. Prerequisite: Concurrent enrollment in approved Management program or consent of instructor.

MGT 231 232 **Seminar** (3,3,0). A seminar in basic elements in management including the nature of management, planning, directing, controlling, organizing, and management development. Prerequisite: MGT 131-132; concurrent enrollment in MGT 241-242 or consent of instructor.

MGT 233 234 **Industrial Management Seminar** (3,3,0). A seminar in the basic elements in management including the nature of management, planning, directing, controlling, organizing, and other management development. Prerequisite: MGT 131-132; concurrent enrollment in MGT 243-244, or consent of the instructor.

MGT 235 **Principles of Marketing** (3,3,0). A study of the role marketing plays in our economy. Special areas in pricing, market places, consumer motivation, and distribution of goods.

MGT 236 **Advertising and Display** (3,3,0). Review of material used in persuasive communication. Includes insights into human behavior and how methods stimulate buying. Familiarizes the student with putting on a promotional program.

MGT 237 **Foremanship** (3,3,0). A class directly related to practices that lead to most effective production by employees. Involves working in a team, training, handling grievances, and other human factors.

MGT 238 **Human Relations** (3,3,0). A study of the procedures to develop good human relations in working with people. Course develops leadership qualities and techniques. Helps those in class to better understand themselves and the people they work with.

MGT 239 **Production Management** (3,3,0). A study of all aspects of production to include plant location and layout analysis, materials, handling systems, preproduction planning, the production process, maintenance analysis, production and inventory control. This course is designed as an overview of the entire production entity.

MGT 241 242 **Management Training** (4,0,20). Continuation of supervised employment in the student's chosen field. Intended to provide increased supervisory responsibility for students preparing for careers in business management. Prerequisite: MGT 141-142; concurrent enrollment in MGT 231-232 or consent of instructor.

MGT 243 244 **Industrial Job Training** (4,0,20). Continuation of supervised employment in the student's chosen field. Intended to provide increased suprvisory responsibility for students preparing for careers in industrial management. Prerequisite: MGT 143-144; concurrent enrollment in MGT 233-234, or consent of the instructor.

MUSIC

Band and Orchestral Instruments

MUS 1131 1132 2133 2134 **Wind Instruments** (1,1,1). Individual instruction in instruments for students who are not instrumental majors. Correct tone production, embrouchure, fingerings for the various instruments. Includes both solo literature and technical work. One half-hour lesson per week with one hour of practice daily.

MUS 1231 1232 **Wind Instruments** (2,1,1). Individual instruction of instrument music majors. A progressive course using Arban, Klose and allied technical studies for the individual student. All major and minor scales, suitable solo material to acquaint the student with both the instrument and the literature for that instrument. Two half-hour lessons weekly, two hours practice daily.

MUS 2233 2234 **Wind Instruments** (2,1,1). Same as above except a continuation on the sophomore level using more advanced solo and technical studies to progress towards an advanced level.

MUS 1171 1172 2173 2174 **Percussion** (1,1,1). Individual instruction in all percussion instruments, including mallet instruments for students who are not instrumental majors. Includes both solo literature and technical work from the standard repertory such as Hashell, Harr, Moeller, etc.

MUS 1271 1272 2273 2274 **Percussion** (2,1,1). Individual isntruction in all percussion instruments, including mallet instruments for students who are Percussion majors. Includes more advanced solo literature and technical work from the standard repertory such as Harr and Moeller, etc.

MUS 110 210 **Study of Strings** (3,1,0). This course is offered for those who wish to learn to play and teach violin, viola, cello and bass. Three hours of lecture and practice are required. Required of music education majors. This is a two-semester course.

MUS 1141 1142 2143 2144 **Strings** (1,1,1). Individual instruction in violin, viola, violoncello, double bass, or guitar for students who are not string majors. Suitable solo and technical literature from the standard repertory will be used. One half-hour lesson per week with one hour of practice daily.

MUS 1241 1242 **String** (2,1,1). Individual instruction in violin, viola, violoncello, double bass, or guitar for string majors working toward a Music Degree. Suitable solo and technical literature from the standard repertory will be used. Two half-hour lessons per week with two hours of practice daily.

MUS 2243 2244 **Strings** (2,1,1). Same as above except a continuation on the sophomore level using more advanced solo and technical studies to progress towards an advanced level.

Music majors and minors must participate in a major ensemble each semester they are enrolled in the music department.

Major Ensembles

MUS 1161 1162 2163 2164 **Choir** (1,3,0). The Texarkana Community College Choir makes local and regional appearances. Open to all students with the approval of the director. Responsibility for public appearances is necessary for membership. Each course carries one hour credit.

MUS 1191 1192 2193 2194 **Band** (1,3,0). The band performs as a concert band during the school year. Open to all students with approval of the director. To be eligible for spring semester activities, a student must participate in both fall and spring semesters or have special permission of the director. This course is required for all instrumental majors.

Minor Ensembles

MUS 1181 1182 2183 2184 **Vocal Ensemble** (1,3,0). The TCC Singers is composed of superior voices selected by the director. This group performs as a single unit as well as in conjunction with concert choir appearances.

MUS 1101 1102 2103 2104 **Stage Band** (1,3,0). Meets regularly through the year and performs standard and special arrangements from the popular and dance idiom. Prerequisite: Satisfactory tryout.

Music Education

MUS 137 **Music Education** (3,3,0). An elementary course in the Fundamentals of Theory as applied and taught in the elementary grades of the public schools. Emphasis is placed on rhythm, scales, intervals, chords, terms, and keys. This course is not open to music majors.

MUS 138 **Music Education** (3,3,0). Detailed study of the methods and objectives of school music and selection of materials for each grade. Emphasis is placed on the preparation and presentation of lessons by individual students. This course is not open to music majors. Prerequisite: MUS 137.

MUS 213 214 **Study of Woodwinds** (1,2,0). This course is offered for those who wish to learn to play and teach clarinet, saxophone, oboe, bassoon, flute, and piccolo. Three hours of lecture and practice are required. Required of music education majors.

MUS 113 114 **Study of Brasses** (1,2,0). This course is offered for those who wish to learn to play and teach cornet, baritone, trombone, french horn, and bass. Required of music education majors. Three hours of lecture and practice are required.

MUS 117 118 217 218 **Class Voice** (1,1,1). The rudiments of vocal music, breathing, correct use of body muscles of breath control, diction, and the development of tone will be studied. Technical development will include the study of interpretation, tone production, pronunciation, and vocal expression. Two hours per week including lecture and laboratory, and two hours outside practice required each week.

MUS 127, 128, 227, 228 **Class Voice** (2,1,1). The course will provide studies for increasing the power, range and quality in vocal production. Composition from the standard repertory will be performed by individual class members. Two hours per week including lecture and laboratory and two hours practice required each week. Prerequisite: MUS 117, 118

MUS 119 **Vocal Diction** (1,1,1). The course will provide for molding the pronunciation of lyrics in the principal singing languages. Emphasis on the international phonetic system will be stressed.

MUS 125, 126, 225, 226 **Class Piano** (2,1,1). This course introduces the beginning student to fundamental keyboard technique. The course is designed for non-music major but will also satisfy the music major applied piano requirement for all music students except piano majors or advanced pianists. The music major will work toward the requirements for a barrier exam.

MUS 115, 116, 217, 218 **Class Piano** (1,1,0). This course is designed for the music major or non music major who has had previous private piano instruction. Improvisational, functional skills, repertoire and pedagogical techniques are covered. ALL STUDENTS PREPARING TO TEACH IN THE PIANO PREPARATORY DIVISION MUST REGISTER FOR THIS COURSE.

Music History and Literature/Appreciation

MUS 133 **Music Appreciation** (3,3,0). This course is designed for anyone who wishes a broader knowledge of the great music of civilization. Emphasis will be placed on listening and enjoying music of the masters. Open to all students without prerequisite.

MUS 134 **Introduction to Jazz** (3,3,0). A survey of modern and historical literature of the jazz idiom. A comparison of size groups, styles, and geographic influence will be made. No previous music instruction required. Three credit hours meeting three contact hours per week.

MUS 233 **Introduction to Music History and Literature** (3,3,0). A survey dealing with the principal forms from the Ars Antiqua, Ars Nova, Renaissance, Baroque, and Classic Periods. 3 hours lecture.

MUS 234 **Introduction to Music History and Literature (continued)** (3,3,0). A survey dealing with the principal forms of the late Classic, Romantic, Impressionistic, and Contemporary periods. 3 hours lecture.

Music Theatre

MUS 1115 **1116** **2115** **2116** **Music Theatre** (1,0,3). This course is designed to give the actor and singer practical experience in music theatre. A study of the integration of music, acting, and staging. The student may pursue this study for four semesters with one credit hour per semester. The course will serve as opera workshop for music majors and minors. No prerequisite necessary.

Music Theory

MUS 041 **Elements of Music** (4,3,2). A preparatory, non-transferable non-credit course for students who have made unsatisfactory scores on the music placement tests. A course designed to overcome obvious deficiencies in the rudiments of music and aural skills. Meets three days a week.

MUS 131 **Elementary Harmony** (3,3,0). An introduction to elementary harmony including a study of scales, intervals, major and minor triads, with inversion and application. Part writing of figured bass exercises and melodic harmonizations requiring the principal triads. Prerequisite: Satisfactory score on placement test or MUS 041.

MUS 111 **Elementary Sight Singing and Ear Training** (1,1,2). Singing in the treble and bass clefs, introduction to alto and tenor clefs, major and minor scales, melodies with harmonic backgrounds of the principal chords. Aural study of beats, their division and subdivisions, intervals and melodies, harmonic progressions of the principal chords. Keyboard application of theory. 1 hour lecture, 2 hours laboratory. THIS COURSE MUST BE TAKEN IN CONJUNCTION WITH MUS 131.

MUS 132 **Elementary Harmony** (continued) (3,3,0). Part writing of figured bass exercises and harmonic backgrounds of all diatonic triads, the dominant seventh and supertonic seventh chords and non-harmonic tones. Enlargement of the period in melodic composition. 3 hours lecture. Prerequisite: MUS 131 and MUS 111.

MUS 112 **Elementary Sight Singing and Ear Training** (continued) (1,1,2). Singing melodies with harmonic backgrounds of all diatonic triads, the dominant seventh and supertonic seventh chords. Aural study of syncopation, intervals and melodies with any diatonic harmonic background, diatonic harmonic progression including the dominant seventh and supertonic seventh chords. Keyboard application of theory. 1 hour lecture and 2 hours laboratory. THIS COURSE MUST BE TAKEN IN CONJUNCTION WITH MUS 132.

MUS 231 **Advanced Harmony** (3,3,0). Part-writing of figured diatonic seventh chords and modulations, styles of writing other than chorals. 2 hours lecture. Prerequisite: MUS 132 and MUS 112.

MUS 211 **Advanced Sight Singing and Ear Training** (1,1,2). Singing modulations to closely related keys, modal melodies. Aural study of superimposition, compound intervals, melodic and harmonic modulation. All diatonic seventh chords. Keyboard application of theory. 1 hour lecture, 2 hours laboratory. Prerequisite: MUS 132 and MUS 112. THIS COURSE MUST BE TAKEN IN CONJUNCTION WITH MUS 231.

MUS 232 **Advanced Harmony** (3,3,0). Part writing of figured diatonic seventh bass exercises and melody harmonization requiring altered chords, 9th, 11th, and 13th chords. Modulation to remote keys. Styles of writing other than the chorale style. Analysis of the larger forms of compositions. Prerequisite: MUS 231 and MUS 211.

MUS 212 **Advanced Sight Singing and Ear Training** (continued) (1,1,2). Singing remote modulations and more difficult melodies. Aural study of unusual and mixed meters, remote modulation, altered chords, 9th, 11th, and 13th chords. Keyboard application of theory skills. 1 hour lecture and 2 hours laboratory. Prerequisite: MUS 231 and MUS 211. THIS COURSE MUST BE TAKEN IN CONJUNCTION WITH MUS 232.

Organ

MUS 1151
1152
2153
2154
Freshman and Sophomore Organ (1,1,1). This course is designed for students who are not organ majors. Although this is a less concentrated course than MUS 1251-1252; 2253-2254 similar literature will be used.

MUS 1251
1252
Freshman Organ (2,1,1). This course is designed for the music major with organ and major instruments. Students desiring to study organ should have studied piano previously and should have attained technical proficiency equivalent to MUS 1211. One hour lesson per week with a minimum of two hours of practice per day is required. The minimum representative requirements in repertory are these:

Gleason: Method of Organ Playing
Manual Technique; Pedal Techniques
Composition for Manuals
Studies and Compositions for Manuals and Pedal

Bach: Eight Little Preludes and Fugues
Works from Orgelbuchlein
Works comparable in difficulty to
Cathedral Prelude and Fugue

Easy compositions by modern American and foreign composers. The student shall perform for jury each semester the requested numbers, and perform in a recital at least once each semester.

MUS 2253 2254 **Sophomore Organ** (2,1,1). This course is designed for the music major with organ as major instrument. It is a continuation of MUS 1251, 1252 and with the minimum representative requirements are these:

Gleason: Method of Organ Playing
Pedal Exercises; Pedal Scales
Compositions for Manuals and Pedal

Bach: Preludes and Fugues of appropriate difficulty
Works from Orgelbuchlein
Works from Schubler Chorals

Brahms: Choral Preludes

Franch: Cantabile, Piece Heroique

Works from forerunners of Bach as well as compositions by modern American and foreign composers.

Piano

MUS 1111 1112 2113 2114 **Freshman and Sophomore Piano** (1,1,1). This course is designed for students who are not piano majors. The course includes the study of suitable technical studies, major and minor scales (M. M. 112) trans-I IV V I chord progression in all keys, sight reading, simple transposition, suitable compositions of Bach, Scarlatti, Clementi, Kuhlau, Mozart, Haydn, Beethoven, Romantic, Impressionistic, and Contemporary composers. One half-hour lesson per week with a minimum of one hour practice daily.

The student shall attend a practice performance each week and perform in a recital at least once each semester. The student shall perform for jury each semester the requested numbers by memory.

MUS 1211
1212 **Freshman Piano** (2,1,1). This course is designed for the music major with piano as major instrument. The minimum requirements are: Hanon, Czerny or other approved studies, all major and minor scales at various rhythms (M. M. 112), arpeggios in root position. Bach — Three part inventions, and Well Tempered Clavier, Sonatas of Mozart, Haydn or Beethoven, music of Chopin, Schubert, Schumann, Brahms or other Romantic composers; literature of the Impressionist and Contemporary composers. One hour lesson or two half hour lessons per week and a minimum of two hours practice daily.

The student shall attend a practice performance each week and perform in a recital at least once each semester. The student shall perform for jury each semester the requested numbers by memory.

MUS 2213
2214 **Sophomore Piano** (2,1,1). This course is designed for the music major with piano as major instrument. The minimum requirements are: All major and minor scales in parallel and contrary motion in various rhythms at (M. M. 112) all major and minor arpeggios in all positions. Bach — Well Tempered Calvier or French Suites; Sonatas by Haydn, Mozart, Beethoven, suitable literature from Chopin, Schumann, Brahms, or other approved Romantic composers; literature of the Impressionistic and Contemporary composers. One hour lesson or two half hour lessons per week with a minimum of two hours practice daily.

The student shall attend a practice performance each week and perform in a recital at least once each semester. The student shall perform for jury each semester the requested numbers by memory.

Synthesizer

MUS 11S1
11S2
12S1
12S2 **Synthesizer** (1,1 - 2,1,1). Private lessons in electronic music synthesizer. Will study standard literature such as Cage, Babbitt and Carlos realizations. The student will become familiar with components of the music keyboard synthesizer and the results of interaction of oscillators, filters, envelope, ring modulator sequencer, and control of all parameters. No prerequisite, open to all students. Ability to read music not necessary.

MUS 21S1
21S2
22S1
22S2 **Synthesizer** (1,1,1 - 2,1,1). Private lessons in electronic music synthesizer. Will study standard literature such as Cage, Babbitt, and Carlos realizations. The student will become familiar with components of the music keyboard synthesizer and the results of interaction of oscillators, filters, envelope, sequencer, ring modulator, and control of all parameters. No prerequisite, open to all students. Ability to read music not necessary.

ASSOCIATE DEGREE NURSING

NUR 111 **Math for Nurses** (1,1,0). This course will provide the student with various kinds of mathematical problems applicable to nursing situations: ratios, fractions, percentages, decimals, apothecary, and metric systems, and household measurements. The students will have opportunity to become familiar with and use appropriate equipment such as syringes and calibrated medical cups. (Lecture 1 hour, Lab 0). Prerequisites: Passing score on math placement test.

NUR 110 **Nursing Orientation** (1,1,0). This is the beginning course for socialization of the student into nursing as a discipline for study and as a profession. The concepts of reality shock are used as applicable to new environment.

For success in the study of nursing, it is assumed that students need certain skills in library use. Acquaintanceship will be made with on-campus resources and students will have opportunity to appraise their own study and test taking skills, life styles and priorities.

The evolution of nursing is introduced, with emphasis on patterns in nursing education. Philosophy and conceptual framework of the William Buchanan Department of Nursing will be disucssed. (Lecture 1 hour, Lab 0). Prerequisites: None.

NUR 181 **Fundamentals of Nursing in Health and Illness I** (8,4,12). This course is designed to provide beginning students with a holistic foundation in the practice of nursing as an integral component of total health care. Emphasis is placed upon the continuum of health and the nurse as facilitator of optimum health. The student will develop basic skills in utilizing the nursing process to individualize nursing care and to enhance man's adaptation to the internal/external environment. It focuses on the skills utilized by the nurse in enabling an individual to maintain activities of daily living.

This course provides a foundation of pharmacology: historical developments, terminology, and legislation. (Lecture 4 hours; Lab 12 hours.) Prerequisites: NUR 110, NUR 111, SCI 141 or CHEM 143, ENG 131, Co-requisites: BIO 145, PSY 231.

NUR 182 **Nursing in Health and Illness II** (8,4,12). This course is designed for first year nursing students who have met the requirements of all prerequisite courses, and will require the student to utilize knowledge and skills acquired in those courses. Emphasis is upon the holistic approach as the student learns biological, sociological, and psychological concepts applicable to the care of the adult. Medical, surgical, and psychiatric concepts

are emphasized in care of individuals with major/minor psychiatric disturbances, cancer, disturbances of fluids and electrolytes, and disequilibrium of the gastro-intestinal, genitourinary, blood and lymphatic systems. Experiences are planned to acquaint the student with care of the individual in the terminal stage of the life cycle. The nursing process, including the therapeutic use of self, is the tool the student will use to apply concepts of nursing intervention and rehabilitation of these individuals and their significant others.

The clinical learning setting will include medical/surgical units, operating room, recovery room, mental health facilities, and local social agencies. (Lecture 4 hours, Lab 12 hours). Prerequisites: NUR 110, NUR 111, NUR 181, SCI 141 or CHEM 143, BIO 145, PSY 231, ENG 131, Co-requisites: BIO 146, PSY 235.

NUR 163 **Nursing in Health and Illness III** (6,3,9). This course is designed for first year nursing students who have met the requirements of all prerequisite courses. Emphasis is upon attaining and maintaining health of the adult following major chronic disorders common to our society (resulting from diabetes, cardiovascular, respiratory, and genitourinary disorders) using biological, sociological, and psychological principles. Concepts of mental health, nutrition, pharmacology and treatment modalities are threaded throughout the course, including an introduction to principles and techniques of parenteral therapy.

The clinical learning settings will include medical/surgical units, medical intensive care unit and surgical intensive care unit. (Lecture 3 hours, Lab 9 hours). Prerequisites: NUR 110, NUR 111, NUR 181, SCI 141, or CHEM 143, ENG 131, BIO 145, BIO 146, PSY 231, PSY 235, NUR 182.

NUR 264 **Nursing in Health and Illness IV** (6,3,9). This is an advanced course designed for second year nursing students who have met the requirements of all prerequisite courses. To emphasize the holistic approach, the student will apply biological, psychological and sociological concepts to the care of the ill adult with complex disturbances of the endocrine, neurological, musculoskeletal, visual and auditory systems, accessory organs of the gastro-intestinal system, and medical/surgical emergencies. Emphasis is upon nursing responsibilities in prevention, intervention, and rehabilitation. Concepts of mental health, nutrition, pharmacology, nursing process and technical skills are threaded throughout the course.

Students are introduced to responsibilities of planning care for groups of patients in secondary settings. This will include theoretical and clinical problem-solving in reference to leadership principles appropriate to the technical nurse, considering that every nurse is a leader.

The clinical learning setting will include medical/surgical units and specialty areas. (Lecture 3 hours, Lab 9 hours). Prerequisites: NUR 110, NUR 111, NUR 181, NUR 182, NUR 163, SCI 141, or CHEM 143, BIO 145, BIO 146, PSY 231, PSY 235, ENG 131, Co-requisites: BIO 242, NUR 215.

NUR 286 **Nursing in Maternity/Child Health** (8,4,12). This course is designed for second year nursing students and focuses upon biological, psychological and sociological concepts as they are applicable to basic needs of families, inclusive of childbearing and childrearing. Emphasis is upon the role of the nurse in maintenance of wellness and provision of care when illness does occur in this group.

Emphasis is upon use of the nursing process to respond to individual and family developmental tasks, and the dynamics of changing roles. Concepts of mental health, pharmacology, nutrition, nursing process and technical skills are threaded throughout the course.

The clinical learning settings will include obstetrical and pediatric units, selected doctors offices, public health, and social agencies. (Lecture 4 hours, Lab 12 hours). Prerequisites: NUR 110, NUR 111, NUR 181, NUR 182, NUR 163, NUR 211, NUR 264, SCI 141, or CHEM 143, PSY 231, PSY 235, BIO 145, BIO 146, BIO 242, ENG 131, Co-requisites: NUR 215

NUR 215 **Nursing Trends** (1,1,0). This is a continuation of NUR 110, with emphasis on the study of nursing as a profession. It is designed to enable students opportunity to examine current trends in society that affect nursing and exploration of her value system in reference to those trends. Further, the course focuses on concepts of reality shock, conflict resolution, and the use of education, credentialing and accreditation in protecting the public's right to safe care. Prerequisites: NUR 110, NUR 111, NUR 181, NUR 182, NUR 163, SCI 141 or CHEM 143, PSY 231, PSY 235, BIO 145, BIO 146, ENG 131.Co-requisites: NUR 264 or NUR 284.

NUR 217 **Graduate Orientation** (1,0,2.5). The focus in this course is upon comprehensive clinical performance. The student will practice various approaches to the delivery of nursing care on selected units of health care facilities. Participation in this course will enable the student to integrate interpersonal com-

petency in the work subculture, conflict resolution, communication and leadership concepts appropriate for the technical nurse in planning with peers, those with lesser preparation, patients/families, considering every nurse as a leader.

The student will plan, provide and evaluate nursing care, for herself and other workers based on assessment of the biological, psychological and sociological needs of the individual patient, in varying states of the life cycle and differing levels of health.

The nursing process is utilized with emphasis on evaluation of effectiveness of nursing care, self-evaluation and peer evaluation. (Lecture 0 hour, Lab 2.5 hours). Prereuisites: NUR 110, NUR 111, NUR 181, NUR 182, NUR 163, NUR 264, NUR 215, SCI 141, or CHEM 143, PSY 231, PSY 235, BIO 145, BIO 146, BIO 242, NUR 285. Co-requisites: NUR 264 or NUR 286.

Vocational Nursing

NUV 131 **Personal and Vocational Adjustments.** Introduction to nursing; nursing ethics; legal aspects; personal hygiene; licensing and nursing associations and publications. Minimum of 18 clock hours of lecture.

NUV 132 **Disease Control and Prevention.** Basic microbiology for understanding importance of maintaining cleanliness and disinfection in relation to prevention of disease, disease control and community health resources. Minimum of 10 clock hours of lecture.

NUV 133 **Vocational Nursing Skills.** Basic nursing concepts; nursing techniques; principles and techniques of drug administration excluding infusions. Minimum of 186 clock hours of lecture.

NUV 134 **Pharmacology.** Weight systems; calculation of dosages; introduction to basic classification of drugs. Minimum of 50 clock hours of lecture.

NUV 135 **Nutrition.** Basic normal nutrition and nutrients required for maintaining health. Introduction to basic hospital diets. Minimum of 26 clock hours of lecture.

NUV 136 **Anatomy.** Basic anatomy and physiology as a background for nursing skills and other subjects. Minimum of 40 clock hours of lecture.

NUV 137 **Basic Practicum.** Beginning experiences in application of theory in a hospital setting. Minimum of 209 practice hours required.

NUV 231 **Medical-Surgical Nursing I.** Nursing of conditions of illness requiring medical and/or surgical treatment. Care of aged. Supportive care inclusive of physical, emotional and spiritual needs. Incorporation of specific drug and diet therapy. Minimum of 88 clock hours of lecture. Advanced Practicum I required concurrent course.

NUV 231.1L **Advanced Practicum I.** Application of theory by practice in the hospital. Minimum of 399 clock hours of medical-surgical experience in the hospital.

NUV 232 **Medical Surgical Nursing II.** Includes aspects of first aid. Minimum of 36 clock hours of lecture.

NUV 232.1L **Advanced Practicum II.** Application of theory by practice in the hospital. A minimum of 509 clock hours includes three weeks on maternity, two weeks in newborn nursing, three weeks in pediatric care, and additional medical-surgical experience.

NUV 233 **Geriatrics.** Normal physical debilitation due to aging process. Conditions and nursing care are incorporated. Minimum of 19 clock hours of lecture.

NUV 234 **Mental Health and Mental Illness.** Basic principles of positive mental health and of psychiatric nursing. Minimum of 20 clock hours of lecture.

NUV 235 **Maternal-Child Nursing.** Normal obstetrics; pregnancy through labor and delivery to post-partum and newborn care (inclusive of complications specific to obstetrics and disease conditions), including physical, emotional and spiritual needs. Effects of drugs and diet on mother and newborn, characteristics and complications of newborn, congenital anomalies and birth injuries. Nursing of children with diseases specific to children, inclusive of growth and development, measures in meeting physical and emotional needs, calculation of pediatric dosages; incorporation of drug and diet therapy. Minimum of 80 clock hours of lecture. Appropriate hospital experience obtained in Advanced Practicum II required.

NUV 103.1L 103.2L 103.3L **Practicum.** Makes use of the time between terms for further practice in the hospitals in order to comply with regulations of the Texas Board of Vocational Nurse Examiners. One week of functional assignment of medications is included as a requirement. Minimum of 157 total clock hours of experience, no lecture.

Office Occupations and Secretarial Careers

OFO 131 **Elementary Typewriting.** Mastery of the keyboard of the touch method; a study of basic machine operation and care of the typewriter. Corrective and accuracy drills are presented along with the development of proper typewriting techniques. An introduction to the typing of letters and simple problems in centering and tabulating are included. (66 clock hours)

OFO 132 **Intermediate Typewriting.** A course designed to develop both speed and accuracy. Study includes special problems in letter arrangement, tabulated reports, problems in centering, rough drafts, and manuscript writing. (66 clock hours)

OFO 231 **Advanced Typewriting.** An advanced course in typewriting with special emphasis on business correspondence, legal reports, telegrams, and other business forms, and various duplicating processes. (66 clock hours)

OFO 133 **Beginners' Shorthand.** An introductory course in principles of Gregg Shorthand, Diamond Jubilee System. Presentation of theory with extensive practice in reading and writing. (66 clock hours)

OFO 134 **Intermediate Shorthand.** A course for students who have had previous instruction in shorthand. Emphasis is placed on dictation and transcription as well as vocabulary building and development of speed. Transcription acceptable for mailing is required. (66 clock hours)

OFO 232 **Advanced Shorthand.** Application of shorthand skills, speed building in transcription and drill on shorthand principles with emphasis on writing speed. (66 clock hours)

OFO 135 **Bookkeeping I.** Training for such clerical duties as preparing monthly statements, making out payroll records, filling out sales slips, preparing daily and periodic summary sheets, keeping accounts receivable records, figuring sales taxes and markup, making out checks and deposit slips, and many other clerical activities. (60 clock hours)

OFO 136 **Bookkeeping II.** Continuation of Bookkeeping I. (60 clock hours)

OFO 233 **Elementary Accounting.** An introduction to accounting in which the principles of double-entry bookkeeping are studied. Emphasis is given to each phase of the accounting cycle as the principles are applied to the single proprietorship type of business organization. (60 clock hours)

OFO 138 **Office Machines.** Functions and operation of electronic calculators, ten-key adding machines and printing calculators for solving fundamental arithmetic computations as they apply to business. (48 clock hours)

OFO 137 **Office Practice I.** Study of business office: etiquette, filing, handling of mail, business forms, office equipment and supplies, development of personality through human relations in business, and obtaining a high degree of professionalism in the office. Telephone techniques, records management, handling mail, and securing employment will be stressed. (48 clock hours)

OFO 234 **Office Pract II.** Continuation of Office Practice I. (48 clock hours)

OFO 139 **Graphic Arts I.** Functions and operation of office printing machines, mimeograph machines, spirit duplicators, charts and graphs. (60 clock hours)

OFO 235 **Graphic Arts II.** Continuation of Graphic Arts I, emphasis of preparation and printing of office media, such as booklets in 2 and 3 color work. (60 clock hours)

OFO 181 **Selected Studies in Office Occupations.** Advanced study in Typing, Shorthand, and/or Accounting as needed with consent of instructor. Emphasis will be placed on terminology and skills needed in specialized areas such as the legal or medical professions. (360 clock hours)

Philosophy

PHL 131 **Philosophy 131** (3,3,0). A survey course designed to acquaint the student with some of the fundamental problems in philosophy and with methods used to deal with them. Some principal views, both ancient and modern, are examined as possible solutions.

PHL 231 **Philosophy 231** (3,3,0). An examination of the relationship of philosophical ideas to the community with emphasis on concepts of natural rights, justice, education, freedom, and responsiblity.

Physical Education

C — Co-educational Physical Education
L — Physical Education Lecture Course
M — Men's Physical Education
W — Women's Physical Education

PHE 110C **Skating** (1,2,0).

PHE 111C **Bowling** (1,2,0).

First Aid (1,1,1). The American Red Cross Standard First Aid Course fulfills requirements for Red Cross Certificate. Required of students with doctor's certification of disability. This course may be elected by any student, but may not be used in lieu of activity courses for those physically able. 1 hour per week.

PHE 112C **Tennis** (1,2,0).

PHE 112L **First Aid** (1,1,1). The American Red Cross Advanced Course. Requirements and restrictions are the same as the PHE 111L. 1 hour per week.

PHE 112M **Weight Training** (1,2,0).

PHE 112W **Body Mechanics and Conditioning** (1,2,0).

PHE 113C **Golf** (1,2,0).

PHE 113M **Gymnastics** (1,2,0).

PHE 113W **Gymnastics** (1,2,0).

PHE 114C **Badminton** (1,2,0).

PHE 114W **Swimming and Diving** (1,2,0).

PHE 115C **Archery and Table Tennis** (1,2,0).

PHE 115L **Instructors Course in First Aid** (1,1,1). This course includes theory and practice of the American National Red Cross Instructors Course in First Aid. This course is designed to meet the requirements set by the American Red Cross for an instructor's certificate. Successful completion of the course prepares the student to teach junior, standard and advanced courses in first aid. Students must take PHE 111L and PHE 112L as prerequisites to this course. 1 hour per week.

PHE 116C **Scuba Diving** (1,2,0).

PHE 117C **Swimming and Diving (intermediate)** (1,2,0).

PHE 118C **Concepts of Physical Activity** (1,2,0). A general course in college physical education designed to teach the biophysical values of muscular activity through lecture and laboratory periods. In the laboratory periods, a swimming proficiency test and a physical fitness test are given to help determine the student's future physical education needs.

PHE 119C **Volleyball** (1,2,0).

PHE 131L **Foundations of Physical Education** (3,3,0). This course is designed as a professional orientation into the major field of physical education, health and recreation. Its contents comprise a brief history, philosophy, modern trends of physical education, teacher qualifications, vocational opportunities, expected competencies, and skill testing.

PHE 132L **Health Concepts** (3,3,0). A course which deals with the principles of personal and community health which includes nutrition, drugs and narcotics, mental health, causes and prevention of diseases, marriage and the family, safety, fitness, and community health problems and service.

PHE 133L **Sports Officiating** (3,3,0). A study of the rules of various sports along with practice in officiating for football, basketball and volleyball. This course will only transfer as an elective.

PHE 211C **Badminton (advanced)** (1,2,0).

PHE 212C **Swimming and Diving (advanced) — Senior Life Saving** (1,2,0).

PHE 214C **Tennis (intermediate and advanced)** (1,2,0).

PHE 215C **Golf (advanced)** (1,2,0).

PHE 216C **Bowling (advanced)** (1,2,0).

PHE 217C **Scuba Diving (advanced)** (1,2,0).

PHE 223C **Water Safety Instructors** (2,3,0). The American Red Cross Water Safety Instructors' Certificate may be granted upon the students' satisfactory completion of the course.

PHE 231L **Elementary Physical Education** (3,3,0). A course designed to study the contents of a program in physical education for the elementary grades. Organization and methods of teaching progressions of elementary activities are taught and practiced.

Physical Science

SCI 141 **Physical Science** (4,3,3). A survey of the principles of physics and chemistry. The material for the two subjects is integrated where possible. (3 hours lecture, 3 hours laboratory.)

SCI 142 **Physical Science** (4,3,3). A survey of geology, meteorology, pollution, and astronomy. (3 hours lecture, 3 hours lab)

Physics

PHY 141 **General Physics** (4,3,3). Designed primarily for students such as pre-medical, pre-pharmacy, geology, and architecture, who do not expect to do additional work in engineering or physics. Elementary vector algebra, mechanics, heat, thermodynamics and sound. (3 hours lecture, 3 hours laboratory.) Prerequisite: MTH 131, MTH 132, or concurrent enrollment.

PHY 142 **General Physics** (4,3,3). Electricity and magnetism, light, and modern physics. (3 hours lecture, 3 hours laboratory.) Prerequisite: PHY 141 or Permission of Instructor.

PHY 243 **Mechanics, Heat and Sound** (4,3,3). A comprehensive course for students of engineering, most pre-medical, most pre-dental, and the physical sciences, providing the background for engineering courses as well as for advanced courses in physics. Elements of mechanics (using both the vector and analytical concepts), heat, and sound. Prerequisite: MTH 231. (3 hours lecture, 3 hours laboratory.) Co-requisite: Math 232.

PHY 244 **Electricty and Magnetism** (4,3,3). A study of the theory of electricity and magnetism with the appropriate measurements and instrumentation. (3 hours lecture, 3 hours laboratory.) Co-requisite: MTH 232.

PHY 245 **Light and Modern Physics** (4,3,3). A study of geometric and physical optics. Atomic and nuclear phenomena with related theory and practices. (3 hours lecture, 3 hours laboratory.) Prerequisite: MTH 233 or concurrent enrollment.

Political Science

PSI 231 **State and Federal Constitutions** (3,3,0). A study of the United States and Texas constitutions. The political institutions of Texas government are emphasized, including political parties, interest groups, legislature, governor, bureaucracy, judiciary, and local government. This course satisfies the statutory requirements for teacher certification. Sophomore standing recommended.

PSI 232 **American Government** (3,3,0). A study of American national government with emphasis upon the Congress, the Presidency, and the federal courts. Additional emphasis upon bureaucracy, criminal procedure, civil liberties, political parties, and voting behavior. Sophomore standing recommended.

Printing

PTG 131 **Cold Type Composition** (3,1,4). A study of the fundamentals of operating typesetting equipment and various methods of preparing copy for printing. Students will study text type in columns, setting up invitations, brochures, simple charts and graphs, using IBM Selectric Composer. Display and headline typesetting using photographic methods of headliners and other equipment will be studied. Imposition and copy correcting methods using the wax coater, pasteup, and cut-in exercises employed by compositers in industry. Basic machine maintenance, proofreading and proofreader's marks will be covered. Students enrolling in this course should have a knowledge of typing.

PTG 132 **Layout and Design** (3,1,4). A study of layout and preparation of camera-ready copy utilizing balance, harmony, and continuity to insure correct usage of space and idea. In accomplishing these ends students will gain experience by performing laboratory projects, assignments requiring the use of standard printing and layout instruments employing industry techniques. Prerequisite or Co-Requisite PTG 133.

PTG 133 **Elementary Offset Presswork I** (3,1,4). Principles, problems and techniques of the operation of an offset press will be studied; and the student will prepare hard copy, make paper plates, and operate the offset press.

PTG 134 **Math for Printers** (3,1,4). A study of basic math for printers including proportional copy, enlargement and reduction, percentages, and conversion of inches into points and picas.

PTG 135 **Mimeograph and Spirit Duplications** (3,1,4). A study of the operation of mimeograph and spirit-duplicators including 4-color printing with spirit duplications. Prerequisite: Sec. 131 or consent of instructor.

PTG 136 **Advanced Layout and Design** (3,1,4). A continuation of PTG 132 with specific emphasis placed on form, design, color, and overlays. Prerequisite: PTG 132 or consent of instructor.

PTG 137 **Letter Press Typography and Presswork I** (3,1,4). A study of layout and design with hard set type for posters, instructional aids, and headline type. Also, a study of letter press, type face, and type construction.

PTG 138 **Offset Camera and Strippers** (3,1,4). A study of photolithographic camera, chemicals, film, and dark room practices.

PTG 231 **Elementary Offset Presswork II** (3,1,4). Principles, problems and techniques of the operation of an offset press will be studied; and the student will prepare hard copy, make metal plates, and operate the offset press. Prequisite: Printing 133 or consent of instructor.

PTG 232 **Ruling and Proportional Copy** (3,1,4). A study of the methods and techniques of ruling and proportional copy. Emphasis will be placed on advanced ruling techniques. Prerequisite: Egr 131 or instructor consent.

PTG 233 **Air Brush** (3,1,4). A study of the general practices of air brush application in the printing industry. Egr 131 or instructor consent.

PkG 234 **Advanced Offset Presswork** (3,1,4). Principles, problems, and techniques of the making of 1, 2, 3, and 4-color offset plates will be studied: student will operate offset press to make multicolor copy. Prerequisite: PTG 231 or consent of instructor.

PTG 235 **General Business Form Work** (3,1,4). A study of actual ruling and screening of forms used in business. Emphasis will be placed on close tolerance work.

PTG 236 **Binding** (3,1,4). A study of binding methods including glue padding, ring binding, stapling techniques and other methods in binding.

PTG 237 **Equipment Maintenance** (3,1,4). A study of correct procedures of preventive maintenance of offset presses, and the use of proper tools, preventive maintenance techniques applied to bindery equipment, collators, folders, drills, power cutters, cameras, platemakers, and other related equipment. This course is geared to troubleshooting and repair of equipment.

Psychology

PSY 111 **Freshman Orientation and Adjustment** (1,1,0). This course is designed to serve as a group study approach to student problems. Course content will evolve out of student interests and needs. Areas of study are adjusting to college, use of library, acquiring basic study skills, improving your personality, making a wise vocational choice. Emphasis will be placed upon active student participation in group activities and self-study. This course is required of all entering freshmen taking 12 or more hours, and the class meets for the first six weeks of semester only.

PSY 231 **Introduction to Psychology** (3,3,0). A study of the basic principles in psychology bearing on growth, motivation, learning, drives, emotions and similar aspects of human behavior.

PSY 232 **Psychology of Adjustment** (3,3,0). This course is a presentation of psychological principles which are fundamental to personal and social adjustment. Prerequisite: PSY 231 Introduction to Psychology.

PSY 233 **General Business Psychology** (3,3,0). Principles of applied psychology; personality development; the adjustment concept — direct attack, substitution, evasion, and retreat; psychology applied to hiring, rating, promoting, and supervision of workers; scientific testing, employee morale; principles of psychological research. Prerequisite: Psychology 231.

PSY 234 **Applied Psychology** (3,3,0). A survey of the applications of psychological knowledge and methods in various fields including education, medicine, law enforcement, social work, corrections, and business with an emphasis on the manner in which crises can be effectively met. Prerequisite: PSY 231

PSY 235 **Human Growth and Development** (3,3,0). The study will concern the physical, mental, and emotional characteristics of the individual from conception throughout the life-span. Specific topics will include: basic theories and research in developmental psychology; parent-child relationships; identification — peer relations, self-concept; language learning — perceptual and cornitive development. Course will give special focus to crises which occur as persons live out their lives. Prerequisite: PSY 231.

Radio/Television
(Semester Hour Program)

RTV 111
RTV 112
RTV 211
RTV 212
Practicum (1,0,1). Supervised practice and instruction in either drama, forensics, radio/television, or speech and hearing therapy, according to the student's major. A maximum of eight hours may be earned in the practicum in addition to the eight course minimum program. Required for all majors for each semester of study. Students receive practical experience at radio and TV stations in the area.

RTV 131 **Introduction to Broadcasting** (3,3,0). A survey course to provide an understanding of the origin, operation, organization and history of broadcasting in the United States.

RTV 132 **Introduction to Mass Communication** (3,3,0). This introductory course is a survey of the media of mass communication as well as an examination of the evaluation of today's concepts in mass communication.

RTV 231 **Radio-TV Announcing** (3,3,0). A study of the principles of radio-TV speaking, including preparation of commercial news, ad program continuity. An introduction to theory and practice in the broadcasting industry from the studio and production point of view.

RTV 232 **Radio-TV News Practice** (3,3,0). A study of broadcasting news practices. The basic rules of broadcasting news writing will be reviewed and stories will be written and delivered for both radio and television. Studio and newsroom procedures will be examined.

Radio and Television Repair
(Clock Hour Program)

RTR 161 **Fundamentals of Electricity** (6,5,25). A study of sources of electricity, resistance, current, voltage, Ohm's law, conductors, insulators, resistors, capacitors, magnetism, relays, direct and alternating current motors. Also shop procedures and safety will be covered.

RTR 162 **Fundamentals of Electronics** (6,5,25). A study of electronic devices and circuits, semiconductors, vacuum tubes, characteristics and testing power supplies, audio amplifiers, speakers, microphones, oscillators, integrated circuits, resistance and voltage analysis.

RTR 163 **Electronic Equipment** (6,5,25). A study of VTVM, VOM, oscilloscope, power meter, grid-dip meter, signal generations, sweep and marker generator, and frequency counter; their use in tuning, alignment, and troubleshooting of electronic equipment. Also a study of amplitude and frequency modulated transmitters, antenna and transmission lines, AM, FM, and stereo multiplex receivers, intercoms and citizen-band radios.

RTR 164 **Black and White Television Theory and Servicing** (6,5,25). Familiarization with safety precautions to be used when working with television receivers, block diagram, operating and service controls and adjustment, schematic diagrams, component location, sweep and n arked generator, television analyst, and servicing diagnosis. Includes a study of tuners, video and sound IF amplifers, video amplifiers, detectors, AGC and sync-circuits, vertical and horizontal deflection circuits, CRT and high voltage circuits, and low voltage power supplies.

RTR 165 **Color Television Theory and Servicing** (6,5,25). Familiarization with safety precautions, operating and service controls and adjustment, block diagram, colorimetery, schematic diagrams, components location, Color Bar-Dot generator, and servicing diagnosis. Also a study of tuners, video and sound IF amplifers, video amplifiers, detectors, AGC and sync-circuits, chroma bandpass and burst amplifiers, color oscillator and synchronization, ACC, AFT, ATC, PCC, ABL, and AFPC circuits, demodulators, video matrixing circuits, vertical and horizontal deflection circuits, CRT and high voltage circuits, automatic degaussing circuits, and low voltage power supplies — theory, alignment, and troubleshooting.

RTR 166 **Electronic Systems** (6,5,25). A study of television cameras, video recorders, and players, CCTV and MATV systems, receiver remote control, and stereo systems.

Real Estate

RLE 131 **Principles of Real Estate** (3,3,0). A general introduction to real estate as a business and as a profession; designed to acquaint the student with a broad range of subjects necessary to the practice of real estate. Topics will include: Licensing procedure, ownership, transfer and legal description, ethics, listing and selling agreements, brokerage, deeds and mortgages.

RLE 132 **Real Estate Practice** (3,3,0). A continuation of Real Estate 131 designed to add a practical application to Real Estate principles. It emphasizes the practice of planning, organization, operation, and professionalism of a Real Estate Office. Prerequisite: RLE 131.

RLE 133 **Real Estate Finance** (3,3,0). A survey of the financial availability of Real Estate financing. Emphasis will be placed upon procedures in financing real estate, obtaining funds, legal aspects of mortgages and related instruments. Prerequisite: RLE 131

RLE 134 **Real Estate Law** (3,3,0). A practice study related to the normal real estate transactions. An application toward real property acquisition, ownership, and transfer. Additional topics include: listing agreements, offer and acceptance, contracts, deeds, liens, and mortgages. Prerequisite: RLE 131

RLE 135 **Real Estate Appraisal** (3,3,0). A survey of basic Real Estate finance. Designed to introduce procedures in financing real estate sales, obtaining financing for a qualified buyer, legal aspects of mortages, and related instruments. Also, a study of practical problems and cases in real estate will be explored. Prerequisite: RLE 131

RLE 136 **Real Estate Marketing** (3,3,0). This is a more in depth study of marketing concepts as they apply to Real Estate sales. This would also include techniques in advertising, display, and multi-media approaches. Prerequisite: RLE 131

RLE 232 **Real Estate Management** (3,3,0). An introduction to the management of several types of income producing real estate properties. Included is management of residential properties, apartment houses, commercial property and land. Also, an overview of collecting revenues, record-keeping, advertising, insurance, leases, and taxes. Prerequisite: RLE 131

RLE 233 **Real Estate Investment** (3,3,0). An introduction to Real Estate investment opportunities. Areas of investment include individual, joint, syndication, or group ownership. Topics of selection, financing, and management are to be included. Prerequisite: RLE 131

Religion

REL 131 **Philosophy of Religion** (3,3,0). This is a non-sectarian study of books of the Old Testament reflecting history, literature, and religious concepts of the Hebrew people from early times to the time of Christ.

REL 132 **Philosophy of Religion** (3,3,0). This is a non-sectarian historical study of man's religious concepts and experiences in the early day Christian Church, as reflected in books of the New Testament.

REL 231 **History of Religion** (3,3,0). A course focusing on the developmental thinking of the Christian Church with regard to critical issues such as the doctrine of God, the nature of man and the use of Scripture.

Secretarial Science

SEC 131 **Elementary Typewriting** (3,3,1). Mastery of the keyboard of the touch methods; a study of basic machine operation and care of typewriter. Corrective and accuracy drill are presented along with the development of proper typewriting techniques. An introduction to the typing of letters and simple problems in centering and tabulating are included. Meets four hours per week.

SEC 132 **Intermediate Typewriting** (3,3,1). A course designed to develop both speed and accuracy. Study includes special problems in letter arrangement, tabulated reports, problems in letter arrangement, tabulated reports, problems in centering, rough drafts, and manuscript writing. Meets four hours per week. Prerequisite: SEC 131 or one year of typewriting in high school.

SEC 233 **Advanced Typewriting** (3,3,0). An advanced course in typewriting with special emphasis on business correspondence, legal reports, telegrams, and other business forms, and various duplicating processes. Prerequisite: SEC 132 or two years of typewriting in high school.

SEC 133 **Office Machines** (3,3,0). Development of functional knowledge and skills in the use of the electronic display calculator and the ten-key mechanical and electronic printing calculators.

SEC 134 **Beginners' Shorthand** (3,3,1). An introductory course in principles of Gregg Shorthand, Diamond Jubilee System. Presentation of theory with extensive practice in reading and writing. Open to students who have not had previous instruction in shorthand. Meets four hours a week. Prerequisite: Typewriting skill or concurrently enrolled in SEC 131.

SEC 135 **Intermediate Shorthand** (3,3,1). A course for students who have had previous instruction in shorthand. Emphasis is placed on dictation and transcription as well as vocabulary building and development of speed. Transcription acceptable for mailing is required. Meets four hours a week. Prerequisite: SEC 134 or consent of instructor.

SEC 138 **Office Practice** (3,3,0). A course designed for students who are interested in clerical or secretarial work. Development of an employable personality and proper work habits, office mail, telegrams, shipping service, telephone techniques, receptionist's duties, banking and financial duties, systems of filing, planning for a professional future, and securing employment. Assignments are given under typical office situations as nearly as possible.

SEC 236 **Advanced Dictation and Transcription** (3,3,0). Continued speed building with stress placed on rapid and accurate transcription of business letters acceptable for mailing. Special attention is given to advanced phrasing and to meet requirements for civil service examination.

SEC 237 **Machine Transcription** (3,3,0). Business letters and communications from a variety of professions and industries are transcribed from recording machines. Development of skill in rapid, accurate, mailable transcripts. Training and efficient use of dictating and transcribing equipment. Co-Requisite: SEC 132 or equivalent.

SEC 238 **Business Correspondence** (3,3,0). Application of letterwriting principles to inquiries and replies, credits, adjustments, collections, sales messages, and simple reports. Prerequisite: Intermediate Typing.

Small Engine Repair

SER 161 **Basic Shop Practices** (6,5,25). A study of shop procedures, use of hand tools, measuring devices, theory of internal combustion engines, both two and four cycle. Introduction to reconditioning of small engines such as lawnmowers, edgers, tillers, etc.

SER 162 **Small Engine Application** (6,5,25). Continuation of SER 161 and advance into Internal Parts Application for related small engines such as outboard motors, motorcycles, and other small engines. Studies include ignition systems, fuel systems, and lubrication systems. Lab application as if working in Small Engine Repair Center. The lab section will be six hours per day for five days each week.

SER 163 **Commercial Applications for Small Engines** (6,5,25). Continuation of SER 162 and advances to commercial small engines and repairs small parts, clean-up systems, portable power units, and other commercial applications. Also advances into accessory or auxiliary repairs connected with small engine servicing and maintenance.

American Sign Language

ASL 131 **American Sign Language I** (3,3,0). Introductory course in American Sign Language. Includes fingerspelling, vocabulary, syntax, history of deaf education, background information on manual communication, oralism, and total communication.

ASL 132 **American Sign Language II** (3,3,0). Advanced course in American Sign Language. Emphasis on vocabulary expansion, a study of English idioms, American Sign Language idioms and basic interpreting.

Sociology

SOC 131 **Principles of Sociology** (3,3,0). A general introduction into the behavior of individuals in social groups, particularly a study of important phases of life as culture, population, institutions, social control, and the major social processes. Analysis of the simpler relations of daily living as illustrative material.

SOC 231 **Social Problems** (3,3,0). Survey of some of the major difficulties to which American society is seeking adjustment. A detailed analysis of courses, social significance, and constructive programs pertinent to difficulties. One problem to be selected for intensive study. Prerequisite: SOC 131 or sophomore standing.

SOC 232 **Marriage and Family** (3,3,0). Study of the marriage relationships; events and attitudes leading to it; problems and experiences arising from it; development of a philosophy regarding marriage and family life. Prerequisite: Sophomore standing or permission of the instructor.

Spanish

SPN 141 **Elementary Spanish** (4,3,2). Instruction three hours a week in the classroom; two hours a week in the language laboratory. Emphasis on listening comprehension, pronunciation, grammar, and conversation.

SPN 142 **Intermediate Spanish** (4,3,2). Continuation of Spanish 141 with instruction three hours a week in the classroom and two hours a week in the language laboratory. Prerequisite: Spanish 141, two units of high school Spanish, or an appropriate score on placement test.

SPN 231 **Composition and Reading** (3,3,0). Emphasis on fluent reading and accuracy in oral and written expression. Prerequisite: Spanish 142.

SPN 232 **Composition and Reading** (3,3,0). Increased work in Spanish literature and written expression. Prerequisite: Spanish 231.

SPN 213 233 **Special Studies** (1,1,0 - 3,3,0). Special studies in Spanish based on interests of individual students. Prerequisite: Spanish 142 and permission of the isntructor.

Speech

SPE 111 112 113 114 **Speech Practicum** (1,3,0). A study of forensic activities for performance and competition. Laboratory practice in debate, oration, oral interpretation, extemporaneous speaking, and discussion. Majors and minors are required to enroll each semester.

SPE 131 **Public Speaking I** (3,3,0). A basic course in the study of effective communications through speech. Emphasis is placed upon content, organization, and delivery of speeches for various purposes and occasions.

SPE 132 **Public Speaking II** (3,3,0). A study of various types of speeches, selection and organization of materials with emphasis on the art of persuasion. Advanced laboratory work in group discussion and speaking. Prerequisite: Speech 131.

SPE 133 **Business and Professional Speech** (3,3,0). Fundamentals of oral communications; study of special types and techniques of speeches most common to business and professional people; practice in business situations; oral reports; sales talks. Panel and committee discussions, and occasional speeches.

SPE 134 **Voice and Phonetics** (3,3,0). 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. Required of speech majors.

SPE 135 **Oral Interpretation** (3,3,0). A study of the technique of effective oral reading. Attention is given to pitch, pronunciation and articulation. Practical experience in Readers Theatre Productions. Prerequisite: none.

Truck Driving

CTD 161 **Commercial Truck Driving** (4,10,50). This is a 280 clock hour class, that meets eight hours per day for seven weeks. Instruction includes Department of Transportation regulations, maneuvering truck tractors, shifting patterns, safety, road exercises, loading and weight distribution, backing, servicing, and other skill training related to safely driving large rigs.

Welding

WEL 161 **Basic Acetylene and Arc Welding** (6,5,25). Orientation, safety, operation, and maintenance of oxyacetylene and arc-welding equipment. Cutting, metal preparation, and plate welding. Fillet and square groove welding of plate with various types and sizes of electrodes appropriate to the type of welding being taught. All position V-groove mild steel plate welding with open stringer, back-up strap, up-hill, welding will be included. (30 clock hours per week, 360 per quarter).

WEL 162 **Electric Arc Welding** (6,5,25). All position V-groove carbon steel plate welding with open stringer and back-up strap. Various types and sizes of electrodes appropriate to the type of welding being taught. Cutting, metal preparation, and acetylene plate welding, ASME testing included. (30 clock hours per week, 360 hours per term).

WEL 163 **Electric Arc Welding** (6,5,25). Up-hill pipe welding, Bell-hole welding, horizontal pipe welding on mild steel pipe with various sizes and types of electrodes appropriate to the types of welding taught are used. ASME testing. (30 clock hours per week, 360 hours per term).

WEL 164 **Bell-Hole and Horizontal Pipe Welding** (6,5,25). Bell-hole and horizontal pipe welding on high carbon pipe with various sizes and types of electrodes appropriate to the type of welding being taught, stick electrodes, stainless steel, pipe welding. (30 clock hours per week, 360 hours per term).

WEL 165 **Special Welding** (6,5,25). Metal inert gas (mig), mild steel, stainless steel, alloy metal, TIG (tungsten) gas welding on aluminum, stainless steel, and alloy metal on pipe and plate. (30 clock hours per week, 360 hours per term).

WEL 166 **Advanced Welding** (6,5,25). Up-hill and Down-hill pipe welding, using both stick electrode and MIG heli-arc stringer. (30 clock hours per week, 360 per term).

INDEX

Absentee Policy 37
Accounting 131
Administrative Staff 10
Admission Requirements 30
Agriculture 59,131
Agri-Business 60
Air Conditioning/Refrigeration 61,132
Air Technology.....62,133
Anthropology.....138
Art 64,138
Astronomy 140
Athletics 43
Audit Policy.....49
Auto Body Repair 65,140
Automotive Mechanics 66,140
Automotive Technology Apprenticeship Program 67,141

Board of Trustees 2
Business Administration ...70,143
Business Education 71
Biology.....72,142

Calendar 4
Chemistry 73,144
CLEP Examinations.....35
Clubs and Organizations 41
Commercial Electronics ...74,145
Computer Science 76,147
Correspondence Credit.....35
Credit by Examination.....35
Credit Union Management.77,147

Data Processing 79,149
Dentistry.....82
Drafting Technology.....82
Drama 83,151
Dropping of Classes 37

Economics 152
Education: 152
Elementary 84
Secondary 85
Emergency Medical Technician Program.....86,152

Engineering 87,153
Engineering Technology.....88
English 155
Evening and Continuing Education 55

Faculty 11
Farm and Ranch Management 89,156
Fees 44
Fire Protection Technology 90,159
Financial Assistance 50
Forestry.....91
French 162

General Information.....24
General Related Courses 162
Geography 163
Geology.....163
Graduation Requirements 32

Heavy Equipment Mechanics 92,163
History 166
Home Economics 166

Industrial Electricity 94,166
Industrial Management 95,167

Journalism 168

Law 96
Law Enforcement Technology 96,169
Loans.....50

Mathematics 97,171
Medical 98
Mid-Management.....99,173
Music 100,174

Non-credit Courses 57
Nursing: 103
Associate Degree 106,182
Vocational.....112,185

Office Occupations 114,187

Philosophy 188

Physical Education 115,189
Physical Science.....190
Physics.....116,191
Political Science.....191
Pre-Dentistry 117
Pre-Law 118
Pre-Medical 119
President's Message 3
Pre-Veterinary Medicine.....120
Printing 121,192
Prizes.....54
Probation 36
Psychology 193
Public Administration 122
Publications 43

Radio/Television (Semester Hour Program).....194
Radio & Television Repair (Clock-hour Program) 123,195
Real Estate 124,196
Refund Policy 48
Rehabilitation Assistance.....54
Religion.....197
Rules and Regulations 36

Scholarships 51
Secretarial Studies 125,198
Senior Citizen Program 58
Sign Language 200
Small Engine Repair 126,199
Social Science.....127
Sociology 200
Spanish 200
Speech 201
Student Activities and Services .39
Suspension 36

Truck Driving.....128,201
Tuition 46

Welding 130,202

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